OWNER'S MANUAL

MAGNAVOX
SMART. VERY SMART.

MDV630R/MDV650R

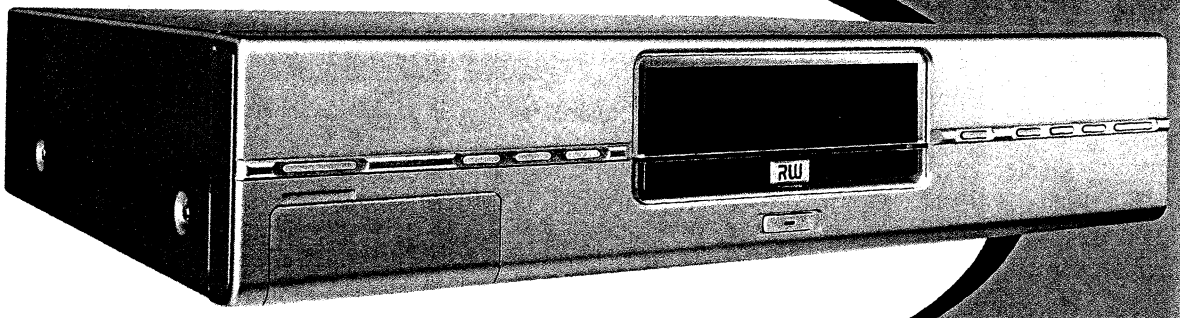
Digital Video Disc Recorder

VCR Plus+

Need help? Call us!

Magnavox representatives are ready to help you with any questions about your new product. We can guide you through Connections, First-time Setup, or any of the Features.
We want you to start enjoying your new product right away!

CALL US BEFORE YOU CONSIDER RETURNING THE PRODUCT.
1-800-705-2000
Or visit us on the web at www.magnavox.com



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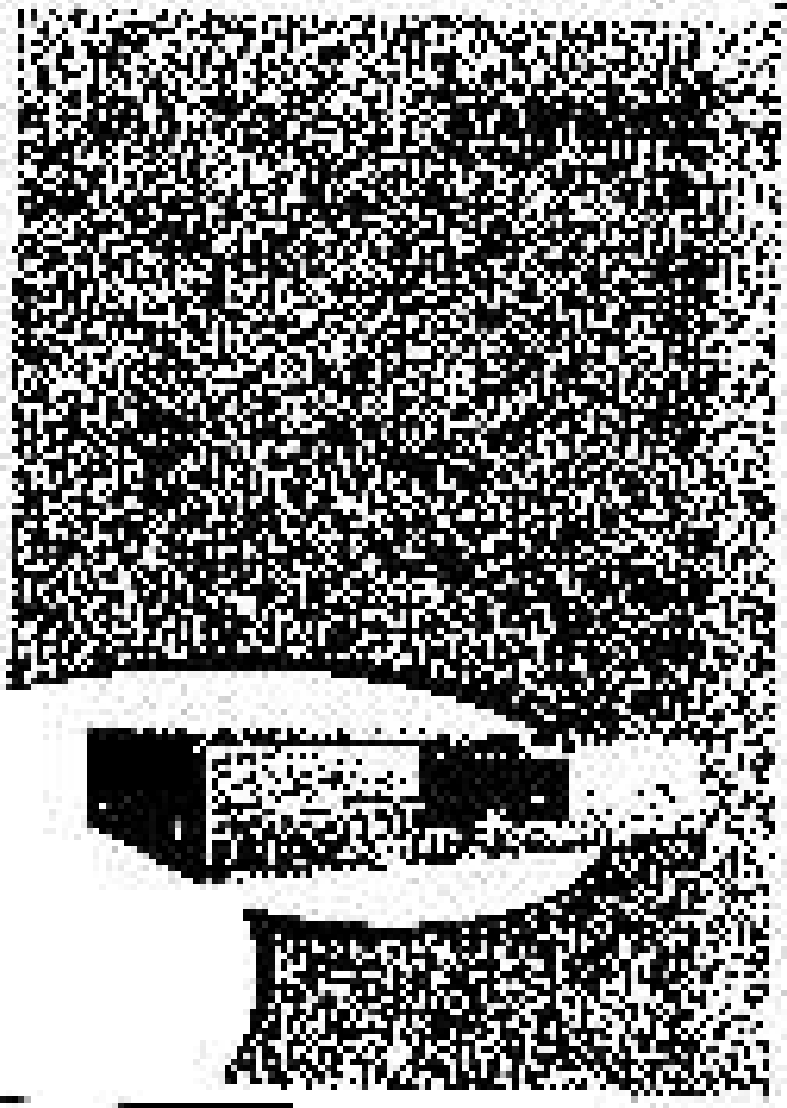


Return your Warranty Registration card today to ensure you receive all the benefits you're entitled to.

Once your MAGNAVOX purchase is registered, you're eligible to receive all the privileges of owning a MAGNAVOX product. So complete and return the Warranty Registration Card enclosed with your purchase at once. And take advantage of these important benefits.

Warranty Verification
Registering your product within 10 days confirms your right to maximum protection under the terms and conditions of your MAGNAVOX warranty.

Owner Confirmation
Your completed Warranty Registration Card serves as verification of ownership in the event of product theft or loss.

Model Registration
Returning your Warranty Registration Card right away guarantees you'll receive all the information and special offers for which you qualify as the owner of your model.

Hurry! NEEDED WITHIN 10 DAYS

Congratulations on your purchase, and welcome to the "family!"

Dear MAGNAVOX product owner:
Thank you for your confidence in MAGNAVOX. You've selected one of the best-built, best-backed products available today. We'll do everything in our power to keep you happy with your purchase for many years to come.
As a member of the MAGNAVOX "family," you're entitled to protection by one of the most comprehensive warranties and outstanding service networks in the industry.
What's more, your purchase guarantees you'll receive all the information and special offers for which you qualify, plus easy access to accessories from our convenient home shopping network.
Most importantly, you can count on our uncompromising commitment to your total satisfaction.
All of this is our way of saying welcome - and thanks for investing in a MAGNAVOX product.

P.S. Remember, to get the most from your MAGNAVOX product, you must return your Warranty Registration Card within 10 days. So please mail it to us right now!

Know these **safety***symbols*

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This "bolt of lightning" indicates uninsulated material within your unit may cause an electrical shock. For the safety of everyone in your house-hold, please do not remove product covering.

The "exclamation point" calls attention to features for which you should read the enclosed literature closely to prevent operating and maintenance problems.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

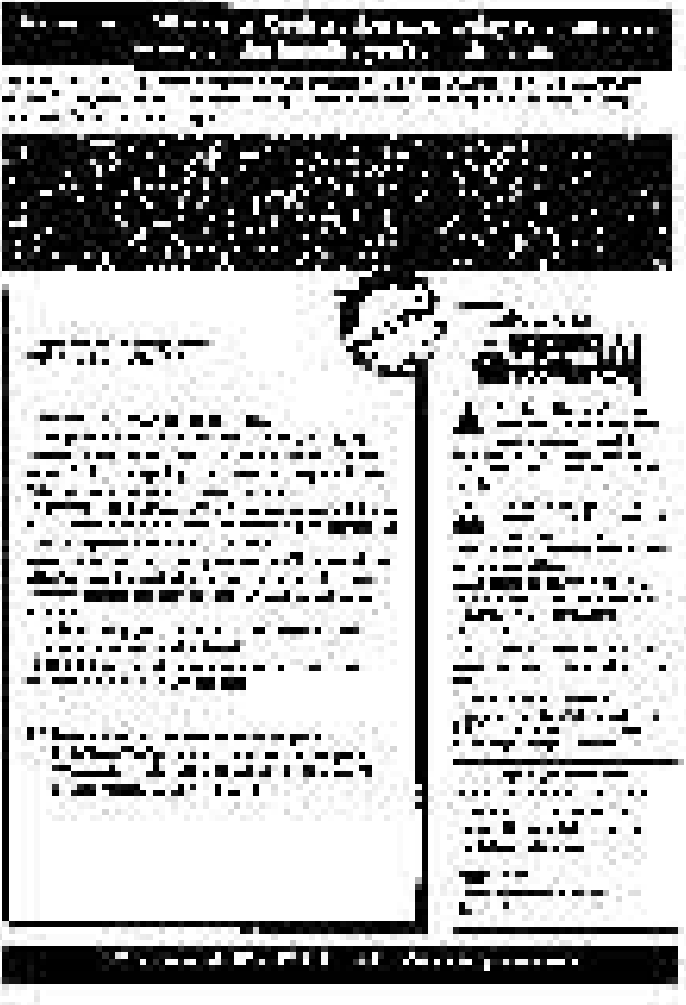
CAUTION: To prevent electric shock, match wide blade of plug to wide slot, fully insert.

ATTENTION: Pour éviter les choc électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

For Customer Use
Enter below the Serial No. which is located on the rear of the cabinet.Retain this information for future reference.

Model No.:
MDV630R/MDV650R
Serial No. _____

Visit our World Wide Web Site at http://www.magnavox.com



Safety Information

Safety Precautions

Warning:To prevent fire or shock hazard, do not expose this equipment o rain or moisture.
Federal Communications Commission (FCC) Warning: Any unauthorized changes or modifications to this equipment void the user's authority to operate it.

Laser Safety

This unit employs a laser. Only a qualified service person should remove the cover or attempt to service this device, due to possible eye injury.
CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. The set complies with the FCC-Rules, Part 15 and with 21 CFR 1040.10.
CAUTION: Visible and invisible laser radiation when open and interlock defeated. Do not stare into the beam. The beam is located inside, near the deck mechanism.

Special Information for Canadian Users

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

Radio/TV Interference

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1) Reorient or relocate the receiving antenna.
2) Increase the separation between the equipment and the receiver.
3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4) Consult the dealer or an experienced radio/TV technician for help.

Note to Cable TV system installer:

This reminder is provided to call the Cable TV(CATV) system installer 's attention to Article 820-40 of the NEC (National Electrical Code) that provides guidelines for proper grounding and, in particular, specifies that the cableground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Copyright Protection

Unauthorized copying, broadcasting, public performance and lending of Discs are prohibited. This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation and is intended for home andother limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Declaration of Conformity

Model Number:	MDV630R/MDV650R
Trade Name:	MAGNAVOX
Responsible Party:	Philips Consumer Electronics P.O. Box 14810, Knoxville, TN 37914-1810(865) 521-4316

IMPORTANT SAFETY INSTRUCTIONS

1. **Read these instructions.**
2. **Keep these instructions.**
3. **Heed all warnings.**
4. **Follow all instructions.**
5. **Do not use this apparatus near water.**
6. **Clean only with a dry cloth.**
7. **Do not block any of the ventilation openings. Install inaccordance with the manufacturer's instructions.**
8. **Do not install near any heat sources** such as radiators,heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. **Do not defeat the safety purpose** of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other.

AC Polarized Plug

A grounding type plug has two blades and a third grounding prong. The wide blade or third prong are provided for your safety. When the provided plug does not fit into your outlet,consult an electrician for replacement of the obsolete outlet.

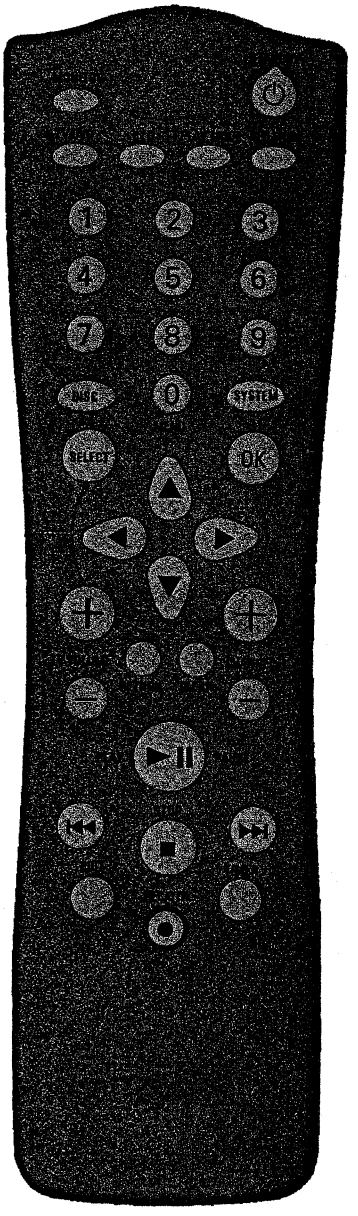
10. **Protect the power cord** from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. **Only use attachments/accessories** specified by the manufacturer.
12. **Use only with a cart,** stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. **Unplug this apparatus** during lightning storms or when unused for long periods of time.
14. **Refer all servicing** to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as if the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, or if the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. **Battery usage CAUTION** - To prevent battery leakage which may result in bodily injury or damage to the unit:
    - Install **all** batteries correctly, **+** and **-** as marked on the unit.
    - Do not mix batteries (**old** and **new** or **carbon** and **alkaline** , etc.).
    - Remove batteries when the unit is not used for a longtime.

EL 6475-E003:01/6

IMPORTANT SAFETY INSTRUCTIONS

The remote control

MONITOR	**Monitor**: To switch between the internal tuner of the DVD recorder (TV reception) and playback of the DVD recorder.
STANDBY ⏻	**Switch on or off**: To switch set on or off, interrupt menu function, interrupt a programmed recording (TIMER)
TV/DVD	**TV/DVD**: To connect the antenna signal directly to the TV. This button lets you switch between the DVD recorder and the antenna signal. This function operates when the DVD recorder is connected to the TV with only an antenna cable.
T/C	**Title/Chapter**: To directly select a 'T'(title)/'C'(chapter) in the menu bar If 'INFO' appears in the display, the index menu of the loaded disc will appear or an introduction will play. In this case, this function will not be available.
PLAY MODE	**Playback mode**: To select Repeat, Shuffle, and Intro Scan
REC. MODE	**Recording mode (quality)**: To select the maximum possible recording duration
0-9	**Number buttons**: 0 - 9 Use to select TV channels.
DISC-MENU	**Disc Menu**: To display the DVD menu or index screen
SYSTEM-MENU	**System Menu**: To display/hide the main menu (menu bar at top of screen)
SELECT	**Select**: To select a function
OK	**Store/Confirm**: To store or confirm an entry
◄ ► ▲ ▼	**Cursor** : To move left, right, up, or down
RETURN	**Back**: To return to the previous menu step on a video CD (VCD). This also functions with some DVDs.
CLEAR	**Delete**: To delete last entry or clear programmed recording (TIMER)
CHANNEL +	**Plus**: Next channel
CHANNEL –	**Minus**: Previous channel
PLAY/PAUSE ►II	**Play/Pause**: To play a recorded disc. When this button is pressed during playback, the disc is paused. You will see a still picture. When this button is pressed during recording, the disc recording is paused.
⏮	**Previous Chapter Track/Reverse search**: Pressing this button once during playback will return to the previous chapter/track/ title or to the beginning of the current title/chapter/track. If this button is held down during playback, it will search backward. If this button is held down during a still picture, it will search backward in slow motion.



[redacted]

▶▶|	**Next title/Chapter/Track/Forward search:** Pressing this button once during playback will jump to the next chapter/track. If this button is held down during playback, it will search forward. If button is held down during a still picture function, it will search forward in slow motion.
STOP ■	**Stop:** To stop playback/recording, except with programmed recordings (TIMER) Holding down the button will open and close the disc tray.
REC/OTR ●	**Record:** To record the current TV channel.
EDIT	**EDIT:** To display the edit menu for DVD+R(W) discs; DVD +R or DVD+RW to set chapter marker
TIMER	**TIMER:** To make a TIMER programming with VCR Plus+ system / without VCR Plus+ system or to alter or clear a programmed TIMER.

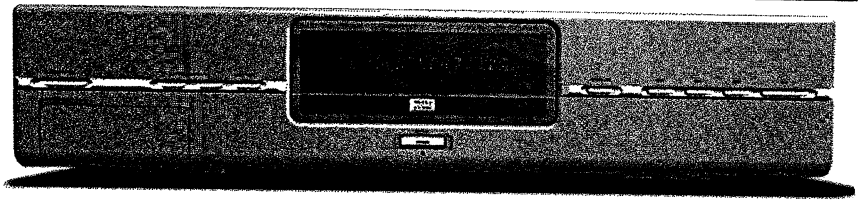
Additional TV functions

TV VOLUME +	**TV volume:** Increase TV volume
TV VOLUME –	**TV volume:** Reduce TV volume

For the following functions, you must hold down the side button **DVD/TV** and then select the function with the corresponding button. For the following functions, you must hold down the side button DVD/TV while pressing the other button.

0..9	**Number buttons:** 0 ... 9: Use to select TV channels.
CHANNEL +	**TV channel number:** TV Channel: Select the next highest TV channel.
CHANNEL –	**TV channel number:** TV Channel: Select the next lower TV channel.

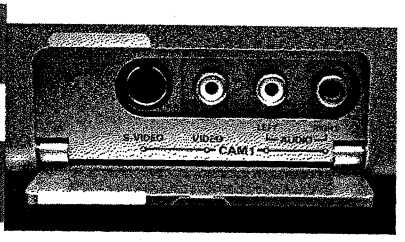
Front of the Recorder



STANDBY/ON	**Switch on or off:** To switch off or on, interrupt a function, interrupt a programmed recording (TIMER).
CHANNEL –	**Select:** Channel forwards
CHANNEL +	**Select:** Channel backwards
REC MODE	**Recording mode (quality):** To select a recording quality.
RECORD	**Record:** To record the currently selected TV channel.

RECORD LED	**Recording in progress:** Red light in the **RECORD** button indicates a recording is in progress.
OPEN/CLOSE	**Open/Close disc tray:** to open/close disc tray
⏮	Previous title/Reverse search
⏭	Next title/Forward search
■STOP	**Stop:** To stop playback.
►II PLAY/PAUSE	**Playback/Pause:** To play a disc, pause playback, still picture

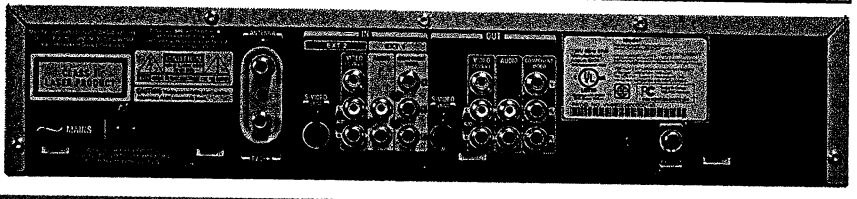
Behind the door at the lower left front corner



S-VIDEO	**S-Video jack:** Input for S-VHS/Hi8 camcorders or S-VHS/Hi8 video recorders (channel number '*CAM 1*')
Yellow jack VIDEO	**Video input jack:** Input for camcorders or video recorders (channel number '*CAM 1*')
White/Red jack left AUDIO right	**Audio left/right (CAM1):** Input for camcorders or video recorders (Channel number '*CAM 1*')

Switching between jack **S-VIDEO** and **VIDEO** is automatic. In case both jacks are occupied, **S-VIDEO** has priority.

Back of the Recorder



~ MAINS	**Power plug:** Connection to the power outlet (110V/60Hz)
ANTENNA	**Antenna input:** Connect your antenna or Cable TV signal here.
TV	**Antenna output:** Connection to the TV

Input jacks

IN S-VIDEO (Y/C)	**S-Video input:** Connection for an additional device (channel number '*EXT2*'). Switching between jack **IN S-VIDEO (Y/C)** and **IN VIDEO (CVBS)** is done automatically.
IN VIDEO (CVBS)	**Video input (yellow jack):** Connection for an additional device (channel number '***EXT2***')

IN L AUDIO R	Analog audio input (red/white jack) underneath jack IN VIDEO (CVBS) : Audio for jack IN VIDEO (CVBS) ; Connection for an additional device (channel number *EXT2*)
IN AUDIO L R	**Analog audio input (red/white jack)** next to jack **IN COMPONENT VIDEO** : Connection for an additional device. Audio input for component video (channel number '*EXT2*')
IN COMPONENT VIDEO	Component video input (red/blue/green jack): Connection for an additional device with component video input (channel number *EXT3*)

Output jacks

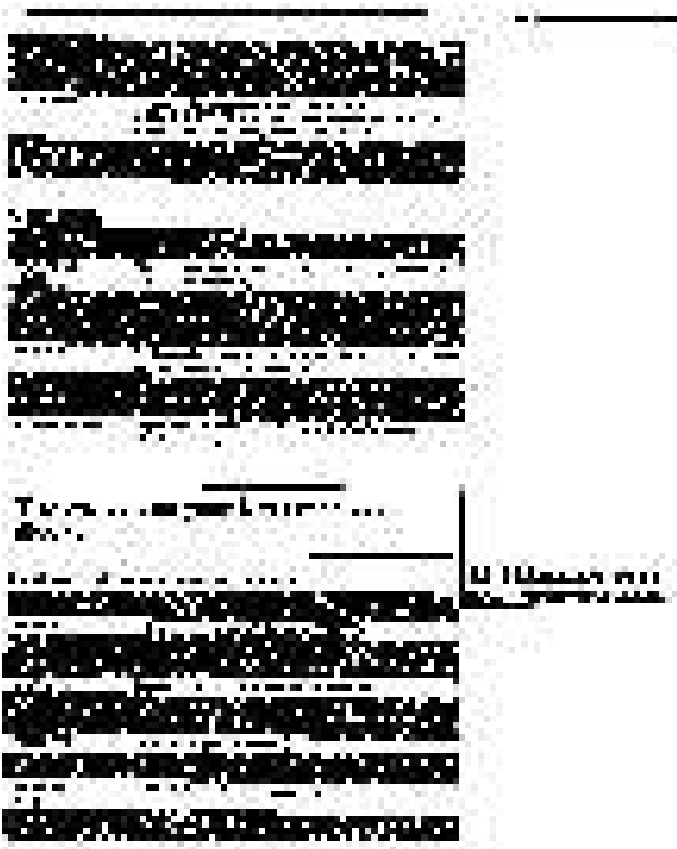
OUT S-VIDEO (Y/C)	S-Video output: Connection for a S-video-compatible TV
OUT VIDEO (CVBS)	**Video output (yellow jack)**: Connection to TV using a video input (CVBS, Composite Video)
OUT L AUDIO R	Analog audio output (red/white jack) underneath jack IN VIDEO (CVBS) : Audio for jack OUT VIDEO (CVBS) ; Connection for an additional device
OUT AUDIO LR	**Analog audio output (red/white jack)**: Connection for an additional device. Audio output for component video
OUT COMPONENT VIDEO	Component video output (red/blue/green jack): Connection for an additional device with component video output
DIGITAL AUDIO OUT	**Digital audio output**: Connection for a digital audio devices (amplifier/receiver)

The symbols on your DVD recorder display

The following symbols may appear on your DVD recorder display:

TITLE TRACK PBC
DVD RW SVCD
CHAPTER TOTAL REMAIN TIME DTS CDDIGITAL MPEG PCM CHANNEL
RECORD RECORDER VPS/PDC MRCAM STEREO TV SAP

TITLE	Displays the title number selected/being played
TRACK	Displays the track selected/being played (VCD/CD)
DVD+RW	Displays the type of disc inserted: DVD/DVD+R/DVD+RW. DVD-R and DVD-RW are displayed as DVD
S-VCD	Displays the type of CD-disc inserted: S VCD/VCD/CD
88+	Recording mode (quality)/Playback mode HQ, SP+, EP, EP+
CHAPTER	Displays the chapter selected/being played
TOTAL TIME	Displays total play time
REMAIN TIME	Displays remaining play or recording time
TIME	Displays current elapsed time



DTS	A DTS (Digital Theatre System) audio signal is available
DD-DIGITAL	A Dolby Digital audio signal is available
MPEG	A MPEG audio signal is available
PCM	A PCM audio signal is available
CHANNEL	Channel
►	Playback in progress. Flashes when Recorder is reading a disc.
II	Playback/Recording interrupted (Pause)
RECORD	Recording in progress
o((	Remote control command has been sent
⏲	A recording (Timer) has been programmed
STEREO	During playback a hifi/2-channel audio signal is recognized, or a hifi/2-channel audio signal is received
TV	Modulator is switched off. The antenna signal (RF signal) is only connected to the TV when the modulator is switched off.
SAP	Second audio program from the tuner is selected.
	Multifunction display/text line - Time - Disc Title play time - OTR time - Title time - Display of TV channel number / disc position / channel name / function - Display of information / warnings

Messages on your DVD recorder display

The following messages may appear on your DVD recorder display. If you name a disc, the disc name will appear on the display panel as well.

READING
TITLE TRACK PRG DVD RW SAVCD 88 CHAPTER TOTAL REMAIN TIME DTS DIGITAL MPEG PCM CHANNEL RECORD RECORDER VPS/PDC NICAM STEREO TV SAP

[illegible]	The DVD recorder is currently in the initial installation mode. Switch on your TV and read section 'Initial installation' in chapter 'Installing your DVD recorder'.
NO SIGNAL	No signal or poor signal strength
[illegible]	The menu display is on.
OPENING	Disc tray is opening.
[illegible]	Disc tray is open.
CLOSING	Disc tray is closing.
[illegible]	Disc is being read.
MENU UPDT	After a successful recording, the list of disc contents is updated.
[illegible]	After the first recording has been successfully completed on a new disc, the menu structure is created.
COPY PROT	The DVD/video cassette you are trying to copy is copy protected.
[illegible]	Please wait until this message disappears. The DVD recorder is busy processing another operation.
NO DISC	No disc has been inserted. If a disc has been inserted, then it is possible that the disc cannot be read.
[illegible]	Information on the inserted DVD is displayed on the screen.
BUSY	The DVD Recorder is busy making changes DVD-compatible.
[illegible]	Entire disc is being erased.
EMPTY DISC	Inserted disc is new or has been completely erased (no recordings present).
[illegible]	Disc cannot be recorded on.
MAX TITLE	The maximum number of titles has been reached for the disc. Each disc can have a maximum of 48 titles.
[illegible]	The maximum number of chapters per title/disc has been reached. The maximum number of chapters per title is 99, and 124 per disc.
DISC FULL	Disc is full. There is no room for new recordings.
[illegible]	A disc with PAL recordings has been inserted and an attempt was made to establish a NTSC signal. Insert a new disc or use a disc containing NTSC recordings.
NTSC DISC	A disc with NTSC recordings has been inserted and an attempt was made to establish a PAL signal. Insert a new disc or use a disc containing PAL recordings.

[redacted]

RECORDING	An unauthorized action was attempted during recording (e.g. pressing the OPEN/CLOSE button).
FREETITLE	The following title is empty.
DISC LOCK	An attempt was made to record on a protected disc during playback. This message will also appear when an attempt is made to insert a chapter marker (EDIT button).
DISC ERR	An error occurred when writing the title. If this happens often, please clean the disc or use a new one. Read section 'Cleaning discs' in the next chapter on how to clean the disc.
DISCWARN	An error occurred when writing the title. The recording will continue, but the error will be skipped.
SETUP	After the automatic channel search, the time/date menu appears on the screen.
SCANNING	During automatic channel search, the detected TV channels are counted.
BLOCKED	It is not possible to close/open the disc tray.
SAFE REC	The new recording will be added to the end of all recordings (SAFE RECORD).

[redacted]

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1 Introduction

Dear Magnavox customer,

Instruction manuals are usually very dry since they are technically-oriented and often poorly translated. I have been employed by Magnavox for this reason.

Allow me to introduce myself.
My name is Phil. I will be guiding you through the instruction manual and try to be of help in operating your new device. At appropriate points along the way, I will be providing you with the following information:

(Question)?
Here I will be explaining seemingly unimportant things.

Tip
Here I will be giving you instructions on functions that help make it easier to use your DVD Recorder.

Problem
Here I will help you find the cause of problems and their solutions.

I hope you have lots of fun with your new DVD Recorder.

Phil

P.S. If you have questions or if problems come up during operation, please see the helpful information in the chapter 'Before you call technical support. If this doesn't help you resolve the problem, please call the **customer support service** for your country.
The corresponding telephone numbers and e-mail addresses are listed in the warranty booklet provided.

Welcome to the large family of Magnavox DVD owners.

Thank you for buying a MDV630R/MDV650R .
Please take the time to read this owner's manual before using your DVD recorder. It contains important information and notes regarding operation.
The DVD recorder should **not be turned on immediately after transportation** from a cold to a hot area or vice versa, or in conditions of extreme humidity.
Wait at least **three hours** after transporting the device. The DVD recorder needs this to acclimate to its new environment (temperature, air humidity, etc.).

Your Magnavox team hopes you will enjoy using your new DVD recorder.

What is a DVD?

DVDs (Digital Video Discs) are the new storage medium that combines the convenience of the Compact Disc with the latest advanced digital video technology. DVD Video uses state-of-the-art MPEG2 data compression technology that allows an entire film to be put on a single 5-inch disc.

How high is the resolution compared to VHS?

The crystal-clear digital pictures have a resolution of over 500 lines, with 720 pixels (picture elements) per line. This resolution is more than double that of VHS and is superior to Laser Discs. The quality can be compared to digital masters made in recording studios.

What is DVD+RW?

DVD+ReWritable (DVD+RW) uses phase-change media, the same technology that formed the basis for CD-ReWritable. A high-power laser is used to change the reflectivity of the recording layer. This process means the disc can be recorded on more than a thousand times.

What is DVD+R?

DVD+R (recordable DVD). In contrast to DVD+RW, this disc can only be recorded once. If a disc has not been finalized after recording, it can continue to be recorded upon in the DVD Recorder. Old recordings can be later deleted, but they cannot be overwritten. The deleted titles are marked as '***Deleted title.***'
For this disc to be played in a DVD player, it must be 'finalized' in the DVD recorder. After this has been completed, no further recordings can be added.

What can my DVD recorder do?

Your Magnavox DVD recorder is a recorder and player for digital video discs, with a two-way compatibility to the universal DVD Video standard. This means that:
•)existing pre-recorded DVDs can be played.
•)recordings made on your DVD recorder can play on existing DVD Video players and DVD-ROM drives. In some cases, the discs may have to be finalized before they will play on other DVD players.

Compatible discs

Using this DVD recorder, you can play and record on the following discs:

Recording and Playback

DVD+RW (Digital Versatile Disc + Rewritable); can be recorded on over and over.

DVD+R (Digital Versatile Disc + recordable); can be recorded on once.

Playback only:

DVD Video (Digital Versatile Disc)

DVD-R (DVD-Recordable)

DVD-RW (DVD-Rewritable). Can only be played back when the recording was made in Video mode and the recording was finalized.

Audio CD (Compact Disc Digital Audio)

Super Audio CD (only plays the CD layer of a hybrid SACD disc)

Video CD (Formats 1.0, 1.1, 2.0)

Super Video CD

CD-R (CD-Recordable) Audio/MP3 contents

CD-RW (CD-Rewritable) Audio/MP3 contents

Region codes

Because DVDs are not released at the same time in all regions of the world, all DVD players are keyed to a specific region code. Discs can be assigned an optional region code. If the region codes of the player and disc do not match, playback is not possible.

This device will only play Region 1 DVDs or DVDs manufactured to be played in all regions ('ALL').
DVDs from other regions cannot be played in this DVD recorder.
The number within the globe represents the region of the world.
Region 1 represents:
U.S, Canada, upper regions of North America, Bermuda, U.S. Virgin Islands and smaller regions near Australia.

Technical data

Voltage : 110-130V/60Hz
Power consumption : 25W
Power consumption (Standby): Less than 3W (clock display off)
Measurements in cm (W/H/D): 43.5/8.8/32.6 (disc tray closed), 46.1 cm (disc tray open)
Weight without packaging approx.: 4.0kg
Power failure/no power supply: Channel and timer data will remain stored for approx. 1 year, the clock data for approx. 12 hours.

Operating position: max. inclination of 10 degrees in any direction
Ambient temperature: 59°F - 95°F
Humidity: 25% - 75%

Accessories

Owner's manual
Warranty booklet
Quick-start guide
Remote control and batteries
Antenna cable
Power cable
Audio cable (with red/white plugs)
Video cable (with yellow plugs)

Accessories MDV-630R

1x DVD+RW

Accessories MDV-650R

2x DVD+RW
3x DVD+R

Important notes regarding operation

Caution!
Visible and invisible laser radiation. When open avoid exposure to beam.

Because of the danger of eye injury, only qualified service personnel should remove the cover or attempt to service this device.

LASER
Type: Semiconductor laser InGaAlP (DVD), AlGaAs (CD)
Wavelength: 660nm (DVD), 780nm (CD)
Output power (out of objective): 20mW (DVD+RW writing), 0.8mW (DVD reading), 0.3mW (CD reading).
Beam divergence: 82 degrees (DVD), 54 degrees (CD)

CLASS 1 LASER PRODUCT

Danger: High voltage! Do not open!
There is a risk of an electrical shock!

The machine does not contain any components that can be repaired by the customer. Please leave all maintenance work to qualified personnel.

As soon as the DVD recorder is connected to the power supply, there are some components that are in constant operation. To switch off the DVD recorder completely you must disconnect it from the power supply.

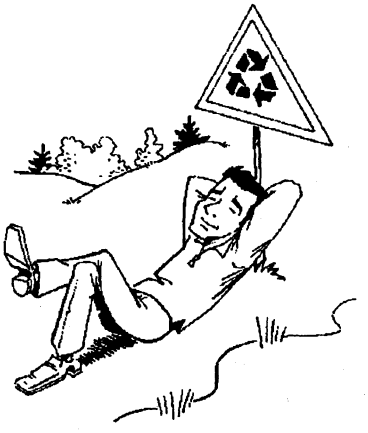
If you disconnect the DVD recorder from the power supply, pull out the power cord's plug from the wall outlet, not only the plug from the jack ~ **MAINS** at the rear of the set. Children playing near the device could suffer injuries at the free end of the cable.

These operating instructions have been printed on non-polluting paper.

Deposit old batteries at the appropriate collection points.

Please make use of the facilities available in your country for disposing of the packaging in a way that helps to protect the environment.

This electronic device contains many materials that can be recycled. Please enquire about the possibilities for recycling your old device.



In a cabinet, allow about 2.5 cm (1 inch) of free space around the recorder for adequate ventilation.

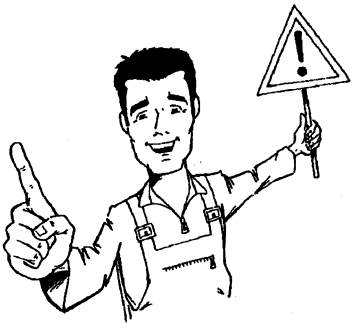
Make sure that air can circulate freely through the ventilation slots on the machine. Do not place the device on an unsteady base.

Make sure that no objects or liquids enter the recorder. Do not place vases or similar objects on the DVD recorder. If liquid spills into it, immediately disconnect the recorder from the power supply and call Magnavox for advice.

Keep the DVD recorder away from domestic heating equipment and other sources of heat, as well as direct sunlight.

Do not place any combustible objects on the device (candles, etc.).

Make sure children do not place any foreign objects into the openings or the disc tray.



Cleaning discs

Some problems occur because the disc inside the recorder is dirty (frozen picture, sound disruptions, picture distortions). To avoid these problems, discs should be cleaned on a regular basis.

1 When a disc is dirty, clean it with a soft cloth. Wipe the disc from the center to the edge in a straight line.

2 Do not use solvents such as benzine, thinner, commercially available cleaners, or anti-static sprays intended for analog discs.

Can I use a cleaning disc intended for DVD players?

Since the optical unit (laser) of the DVD recorder operates at a higher power than regular DVD or CD players, these kinds of cleaning CDs may damage the optical unit (laser).
Therefore, refrain from using a cleaning CD!

Special functions of your new DVD recorder

Your MAGNAVOX DVD recorder has special functions that will make day-to-day use of your new DVD recorder easier for you.

This screen provides you with an overview of the inserted disc. Each index screen corresponds to a recording. At the right-hand side of the screen, a disc pointer is shows the duration and position on the disc of the selected recording.

MP3 files are highly compressed pieces of music. The amount of data of the original audio material is reduced by 1/10 of the original size using a special process. This enables you to fit up to 10 hours of music on a single CD.
These kinds of music CDs can be played using this recorder.

Safe Record

Normally, a new recording is made on the current location on the disc. This is the same with video cassettes. However, by holding down REC/OTR ●, the new recording will be made after the last recording on the disc. This helps you avoid recording by mistake.
New recordings on a DVD+R disc will always be added after the end of all recordings.

The Magnavox DVD recorder can play DVDs and CDs. DVDs made using this DVD recorder can be played in most other DVD players.

This is a standard from Dolby Laboratories for the transmission of 5.1 channel sound. This acoustical playback system is used to transmit five full channels. In addition, one channel is used exclusively for low frequencies (effects). Speakers are positioned at front left, center, and front right as well as rear left and right. This system is currently the most common and is also used in movie theaters.
This DVD recorder records each sound in two-channel Dolby Digital on a DVD+RW.

Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

Transmission standard for 5.1 channels from Digital Theatre Systems, Inc. It is the second most common after Dolby Digital.

This product incorporates copyright protection technology that is protected by US patent numbers 5,631,693, 5,577,266 and 4,819,098, as well as other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is only intended for home use and other pay-per-view applications. Macrovision must provide written authorization for any other use. Changes to the device, reverse engineering, or disassembly is prohibited.

Simple programming system for DVD recorders. Makes programming as easy as making a telephone call. Simply enter the number code associated with your television program. This number is located in your television listings magazine.

VCR Plus+ and PlusCode are registered trademarks of Gemstar Development Corporation. The VCR Plus+ system is manufactured under licence from Gemstar Development Corporation. US patent no.: 5.307.173, 5.335.079, 4.908.713, 4.751.578 and 4.706.121

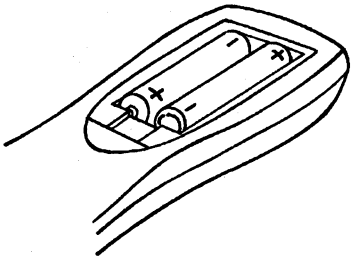
So that you can identify your machine for service questions or in the event of theft, enter the serial number here. The serial number (PROD. NO.) is printed on the type plate fixed at the rear of the recorder:

MODEL NO.	MDV630R/MDV650R
PROD. NO.	.....

2 Connecting the DVD recorder

Preparing the remote control for operation

The remote control and its batteries are packed separately in the original DVD recorder packaging. You must install the batteries in the remote control before use.



1 Take the remote control and the enclosed batteries (2 AA batteries).

2 Remove the battery compartment lid, insert the batteries as shown, then replace the battery compartment lid. Always install the +/- ends of the batteries as indicated inside the battery compartment.

The remote control is now ready to use.
Its range is approximately 16-32 feet (5 to 10 meters).

Tip

Aim correctly

In the following sections, you require the remote control for the first time. When using, always aim the front of the remote control at the DVD recorder, and not at the TV.

Connecting your DVD recorder to the TV

The necessary cable connections must be made before you can record or playback TV programs using your DVD recorder.

Connect the DVD recorder **directly** to the TV. Connecting a video cassette recorder between the DVD recorder and the TV could result in poor picture quality because of the copy protection system built into the DVD recorder.

When you install your DVD recorder for the first time, select one of the following options:

'Connecting with Component Video (Y, Cr, Cb, YUV)'
If your TV is equipped with Component Video (Y, Cr, Cb, YUV).

What is 'Component Video (Y PB PR)'?

It is a system for transmitting high-quality video by splitting the video signal into the Y (brightness), U and V (red minus brightness, blue minus brightness) components. The jacks for these cables are usually red, green, and blue.

This connection provides a studio quality picture.

'Connecting with S-Video (Y/C)'
If your TV is equipped with a S-Video (SVHS) jack.

What is a 'S-Video (Y/C) cable'?

Also called a S-VHS cable, it is a video connection standard in which the Y signal and the C signal are transmitted separately. This mini-din jack/jack is also called a hosiden jack/jack.

'Connecting with a Video (CVBS)' cable'
If your TV is equipped with a Video (CVBS) jack.

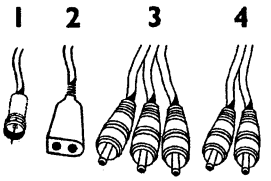
What is a 'Video (CVBS)' jack?

This typically yellow jack is used to transmit composite video signals (FBAS, CVBS). This system transmits the Y and C signals over the same line. In some cases, this can lead to picture distortions, or 'Moiré'.

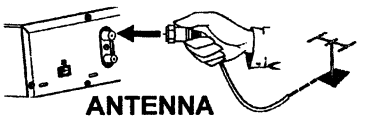
'Connecting only with the antenna cable'
If you do not wish to use any other cable. You may use an antenna cable (RF coaxial) if you prefer or if your TV has only an Antenna In jack (no other audio and video in jacks). The TV's Antenna In jack may be labeled ANT IN, RF IN, 75 ohm, etc. Check your TV instructions for details.

Connecting with a Component Video (Y Pb Pr) cable

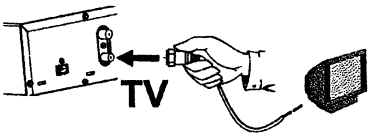
Have the following cables ready:
an antenna cable (1 supplied), a power cable (2 supplied), a Component Video (Y PB PR) cable (3, red, green, blue jack) or a corresponding video-compatible cinch cable, an audio cable (4 supplied red/white jack).



1 Remove the antenna or cable TV signal from your TV. Connect it to the ANTENNA jack at the bck of the DVD recorder.



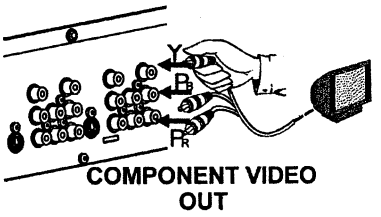
2 Insert one end of the supplied antena cable into the TV plug at the back of the DVD recorder and the other end into the antenna input jack at the back of the TV.



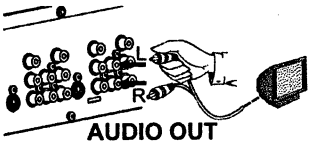
3 Use the Component Video (Y PB PR) cable and connect one end to the red, blue, green **OUT COMPONENT VIDEO** jacks at the back of the DVD recorder and the other end to the Component Video In jacks of the TV.

Please note the color order

The colors of the jacks on the DVD recorder must match those on the TV (red-red/blue-blue/green-green). If they are not matched properly, this could cause the color of the picture to be reversed or there could be no picture at all.

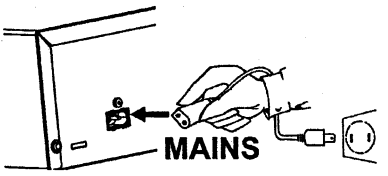


4 Use the supplied audio cable and plug one end into the **OUT AUDIO LR** jack at the back of the DVD Recorder (next to **OUT COMPONENT VIDEO**) and the other into the red/white Audio In jacks of the TV (usually called Audio in', 'AV in'. Please see your TV's owner's manual).



5 Switch on the TV.
Set the TV to the Component Video channel
If necessary, see the operating instructions for your TV. Or, go to channel zero on your TV, then keep changing channels down until you see the DVD Recorder screens (when the Recorder is on). This is not channel 3 or 4 as it would be if you used only the cable/antenna connection.

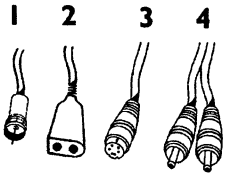
6 Insert one end of the supplied power cable into the power outlet ~**MAINS** at the back of the DVD recorder and the other end into the wall socket. '15 TV ONP' will appear on the display.



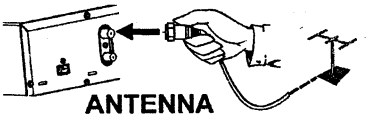
Then, read 'Initial installation' in 'Installing your DVD recorder.'

Connecting with a S-Video (Y/C) cable

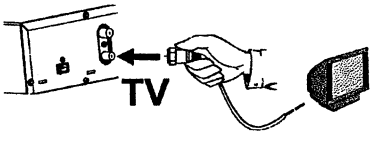
Have the following cables ready:
an antenna cable (1, supplied), a power cable (2, supplied), a S-video (SVHS) cable (3), an audio cable (4, supplied red/white jack).



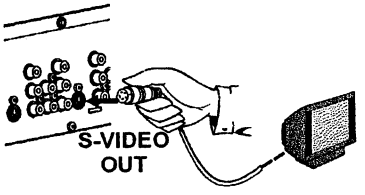
1 Remove the antenna cable plug from your TV. Insert it into the **ANTENNA** jack at the back of the DVD recorder.



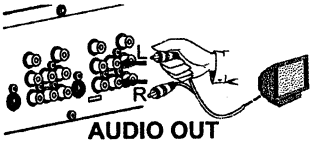
2 Insert one end of the supplied antenna cable into the **TV** jack at the back of the DVD recorder and the other end into the antenna input jack at the back of the TV.



3 Use a S-Video (SVHS) cable and plug one end into the **OUT S-VIDEO (Y/C)** jack at the back of the DVD Recorder and the other end into the S-Video (SVHS) In jack of the TV (usually called S-Video in or SVHS in. Please see your TV's owner's manual).

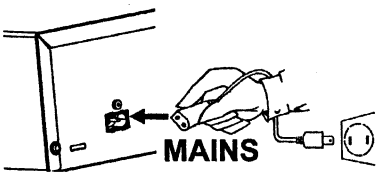


4 Use the supplied audio (cinch) cable and plug one end into the red/white cinch jack **OUT L AUDIO R** at the back of the DVD Recorder (next to **OUT S-VIDEO (Y/C)**) and the other into the corresponding red/white audio input of the TV (usually called Audio in', 'AV in'-please see your TV's manual).



5 Switch on the TV. Then switch the set to the SVHS input jack or select the corresponding channel number. You will find the channel number in the operating instructions of your TV.

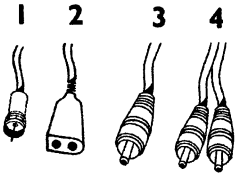
6 Insert one end of the supplied power cable into the power outlet ~ **MAINS** at the back of the DVD recorder and the other end into the wall jack.
A message, '15 TV ON?' will appear on the Recorder's display to remind you to set your TV to its Audio/Video In channel.



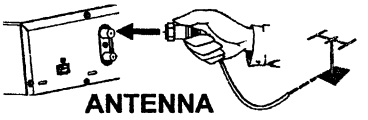
Then, read the paragraph 'Initial installation' in the chapter 'Installing your DVD recorder'.

Connecting with Video (CVBS)

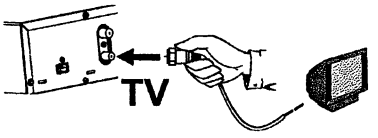
Have the following cables ready:
an antenna cable, a power cable, a video (CVBS) cable (with yellow ends), and an audio cable (with red/white ends).



1 Remove the antenna cable plug from your TV. Insert it into the **ANTENNA** jack at the back of the DVD recorder.

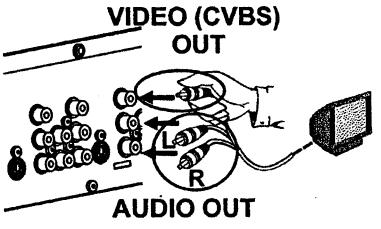


2 Insert one end of the supplied antenna cable into the **TV** jack at the back of the DVD recorder and the other end into the antenna input jack at the back of the TV.



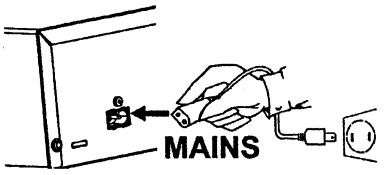
3 Use the supplied video (CVBS) cable and plug one end into the yellow jack **OUT VIDEO (CVBS)** at the back of the DVD Recorder and the other end into the Video In jack (usually yellow) of the TV (usually called Video in or AV in. See your TV's owner's manual).

4 Use the supplied audio (cinch) cable and plug one end into the red/white cinch jack **OUT L AUDIO R** at the back of the DVD Recorder (beneath **IN VIDEO (CVBS)**) and the other into the corresponding red/white audio input of the TV (usually called 'Audio in', 'AV in'-please see your TV's manual).



5 Switch on the TV. Switch the TV to the Video/Audio input jack or select the corresponding channel. For the channel, please see your TV's operating instructions.

6 Insert one end of the supplied power cable into the power outlet ~**MAINS** at the back of the DVD recorder and the other end into the wall jack.
A message, 'PLEASE TV ON' will appear on the Recorder's display to remind you to set your TV to its Audio/Video In channel.

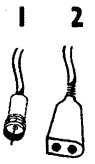


Then, read the paragraph 'Initial installation' in the chapter 'Installing your DVD recorder'.

Connecting only with the antenna cable

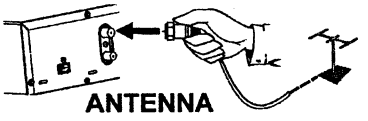
USE THIS CONNECTION IF YOUR TV ONLY HAS A SINGLE ANTENNA IN JACK AND DOES NOT HAVE ANY AUDIO/VIDEO JACKS.

Have the following cables ready:
an antenna cable (supplied), and a power cable (supplied).

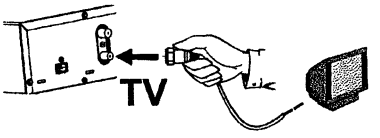


1 Switch off your TV.

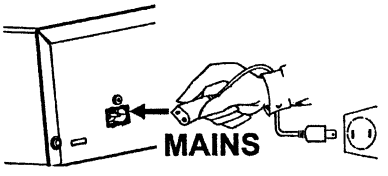
2 Remove the antenna or Cable TV signal from the antenna input jack of the TV. Connect it to the **ANTENNA** jack at the back of the DVD recorder.



3 Connect one end of the supplied antenna cable to the **TV** jack at the back of the DVD recorder and connect the other end into the antenna jack at the back of the TV.



4 Insert one end of the supplied power cable into the power outlet ~**MAINS** at the back of the DVD recorder and the other end into the wall jack.
A message, 'PLEASE TV ON' will appear on the Recorder's display to remind you to set your TV to its Audio/Video In channel.



5 Switch on your TV and select the channel used for DVD/VCR playback on your TV. Choose between channel 3 or 4. Use your TV remote to set the TV to 3 or 4.

How do I switch the Recorder between channel 3 and 4?

The factory setting is for channel 3. However, if you would like to switch to channel 4, proceed as follows:

1 Press **CHANNEL +** while '15 TV ONE' is displayed. 'C04' (channel 4) will appear on the display.

2 If you want to switch back to channel 3, press **CHANNEL −** . 'C03' (channel 3) will appear on the display.

6

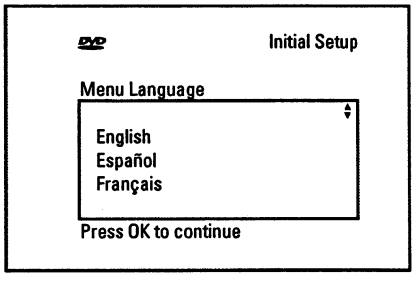
Switch your TV to the selected channel (channel 3 or 4).
The menu for language selection will appear on the screen.

***I don't see a menu for language selection**

✓ Check the cable connections.

✓ Is 'DVDR' (DVD recorder operation) lit up in the display? If not, press the **TV/DVD** button until 'DVDR' is lit.

✓ Change between channel 3 and 4 on the TV.



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This TV channel number must be used in the future for DVD recorder playback.

Then, read the paragraph 'Initial installation' in the chapter 'Installing your DVD recorder'.

3 Connecting additional devices

You can connect additional devices such as decoders, satellite receivers, camcorders, etc. to the **IN S-VIDEO (Y/C)**, **IN VIDEO (CVBS)**, **IN COMPONENT VIDEO** jacks on the recorder. You will also use the AUDIO IN jacks of the Recorder for connecting to other devices.

Can I also connect devices with 'Progressive scan'?

The **IN COMPONENT VIDEO** jacks are only used for 'interlaced' signals. Signals using progressive scan cannot be processed by the DVD recorder.

Connecting an additional video recorder

You can also connect a video recorder to the input jack. Please use the **IN S-VIDEO (Y/C)** jack and the **IN L AUDIO R** jacks for SVHS video recorders.

Please be aware

Most pre-recorded video cassettes and DVDs are copy protected. When you attempt to copy them, the '*COPY PROT*' message will appear in the DVD recorder display.

***When copying video cassettes '*NO SIGNAL*' appears in the DVD recorder display**

✓ Check to make sure that the scart cable is inserted properly.

✓ If the recording is made from a video recorder, adjust the "tracking" on the video recorder.

✓ The DVD recorder may sometimes not recognize video input signals that are poor or non-standard.

***When copying from DVDs or pre-copied video cassettes, the picture is grainy and the brightness fluctuates.**

✓ This occurs when you attempt to copy copy-protected DVDs or video cassettes. Although the picture on the TV is OK, the recording is distorted on a DVD+R(W). Copy-protected DVDs and video cassettes cannot be copied without these disruptions.

Connecting a camcorder to the front jacks

The front video and audio jacks can be used to easily connect a camcorder to the DVD recorder. These jacks are behind the door in the lower left corner of the front panel.

Very good Picture Quality

If you are using a Hi8 or S-VHS camcorder, connect the **S-VIDEO** IN jack of the DVD recorder to the corresponding S-video out jack on the camcorder.
You must also connect the **left AUDIO right** In jacks of the DVD recorder to the audio out jacks on the camcorder.

Good Picture Quality

If your camcorder only uses a video output (Composite Video or CVBS), connect the **VIDEO** input of the DVD recorder to the corresponding Video Out jack on the camcorder.
You must also connect the **left AUDIO right** In jacks of the DVD recorder to the audio out jacks on the camcorder.

Connecting audio devices to analog audio jacks

There are Left/Right Audio Out jacks **OUT L AUDIO R** and two Left/Right Audio In jacks **IN L AUDIO R** on the back of the DVD recorder.

These can be used to connect the following devices:
- **an receiver with Dolby Surround Pro Logic**
- **a receiver with two-channel analog stereo**

Can I use the 'Phono input' of my amplifier?

This amplifier jack (input) should only be used for record players without amplifiers. Do **not** use this input for connecting the DVD recorder.
This could damage the DVD recorder or the amplifier.

Connecting audio devices to the digital audio jack

The rear of the DVD recorder has a **DIGITAL AUDIO OUT** jack for a coaxial cable connection.

It can be used to connect the following devices:

•) a Audio Video receiver or an Audio Video amplifier with a digital multi-channel sound decoder

•) a receiver with two-channel digital stereo (PCM)

Digital multi-channel sound

Digital multi-channel sound provides maximum sound quality. It requires a multi-channel Audio Video receiver or amplifier that supports at least one of the DVD recorder's audio formats (MPEG2, Dolby Digital, or DTS). Check your receiver's manual to see which format it supports.

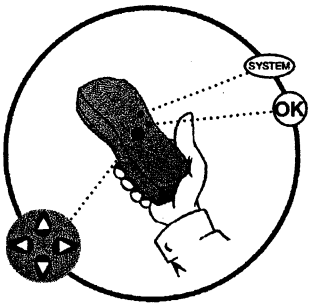
× A loud distorted sound is coming from my speakers

✓ The receiver does not support the digital audio format of the DVD recorder. The audio format of the inserted DVD is displayed in the display panel when another language is switched on. Playback using 6-channel digital surround sound is only possible when the receiver has a digital multi-channel sound decoder.

4 Installing your DVD recorder

Initial installation

After you have successfully connected the DVD recorder and other devices to your TV (as described in the previous chapter), this chapter will help you start the initial installation. The DVD recorder automatically seeks and stores all available TV channels.



'Correct aiming' of the remote control

In the following sections, you require the remote control for the first time. When using, always aim the front of the remote control at the DVD recorder, not the TV.

Connecting additional devices

If you have connected additional devices (satellite receiver,...) via the antenna cable, switch them on now. The automatic channel search will recognize them and save them.

No antenna connected

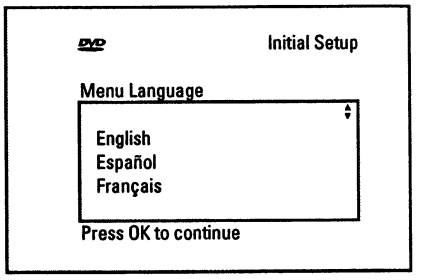
If you are only using the DVD recorder as a playback device or you only have a satellite receiver connected, you still need to perform the initial installation. This is necessary so the basic settings can be saved correctly. After the initial installation is completed once, you can used the DVD recorder normally.

Tip

1 Select the desired language for the on-screen menu by pressing ▼ or ▲ .

What is an on-screen menu?

The multi-language on-screen menu takes the mystery out of using your new DVD recorder. All settings and/or functions are displayed on your TV screen in one of the available languages (English, French, or Spanish).

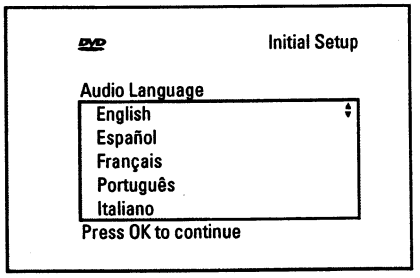


2 Confirm by pressing **OK** .

3 Select the desired audio language using ▼ or ▲ .

What is the audio language?

The DVD audio will play in the selected language if it is available. If this language is not available on the DVD, the audio will play in the first language on the DVD. The DVD disc menu will appear in the selected language if it is available on the disc.



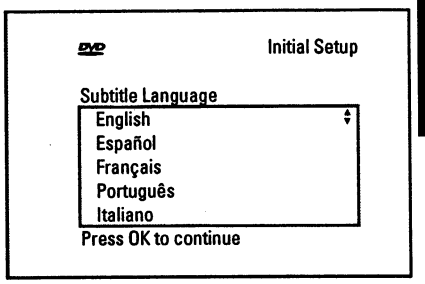
4 Confirm by pressing **OK** .

5

Select the desired language for the subtitles by pressing ▼ or ▲.

What is the language of the subtitles?

DVD subtitles will be in the selected language if it is available. If this language is not available, subtitles will be in the first language on the DVD.



6

Confirm by pressing **OK**.

7

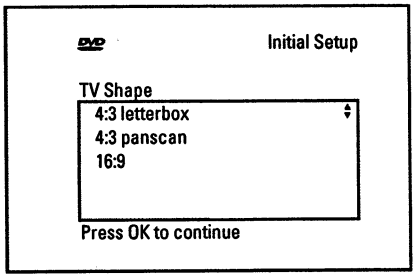
Select the desired screen format with ▼ or ▲. This setting only functions if you have inserted a DVD recorded in this format.

Which screen formats can I choose?

4:3 letterbox for a wide-screen display (theatrical format) with black bars at the top and bottom of the picture.

4:3 panscan for a full-height picture with the sides trimmed to fill you TV screen.

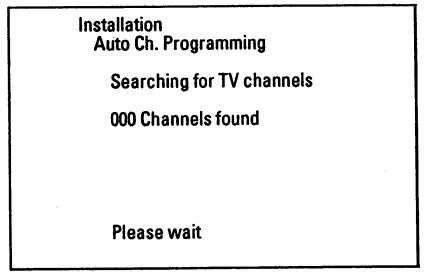
16:9 for wide-screen TV (16:9) aspect ratio



8

Confirm by pressing **OK**.

After you connect the antenna (or cable TV signal, satellite receiver, etc.) to the DVD recorder, press **OK**
Make sure the Cable TV signal is connected securely to the Antenna jack on the rear of the DVD Recorder.
The automatic TV channel search starts. '*WAIT*' will appear on the display.



×During the channel search, if the DVD recorder does not find any TV channels:

✓ Select another channel on the TV. Do you see that channel on the TV set?
If not, check the connections between the DVD recorder and the TV.

✓ Please have patience.
The DVD recorder searches the entire frequency range in order to find and save the largest possible number of TV channels. It is possible that the TV channels in your country are broadcast in a higher frequency range. As soon as this range is reached during the search, the DVD recorder will find the TV channels.

✓ If no antenna is connected, complete the basic settings and then, if desired, start the automatic channel search (see section 'Automatic TV channel search').

×The DVD recorder finds very few/no channels during the search.

✓ It is possible that the automatic switching between antenna/cable does not properly detect your TV signal. Read the section about how to switch manually.

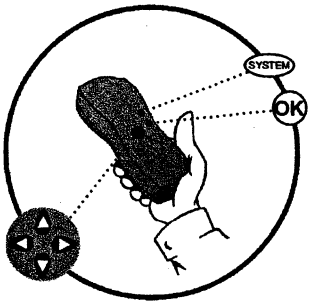
9 Wait until all available TV channels have been found. This can take several minutes.

10 As soon as the automatic TV channel search is completed, '***Auto ch. search complete***' will appear on the TV screen along with the number of channels found.

11 To remove the menus, press the **SYSTEM-MENU** button on the Recorder's remote control.

The initial installation is now complete.

Automatic TV channel search



During installation, all available TV channels are searched for and saved. If the channel assignments of your cable or satellite TV provider change or if you are reinstalling the DVD recorder, e.g. after moving, you can start this procedure again. This will replace the TV channels already saved with the new ones.

1 Switch on the TV. If required, select the channel number for the DVD recorder (channel 3 or 4 or the Audio/Video In channel).

2 Turn on the DVD recorder by pressing **STANDBY/ON**.

3 Press **SYSTEM-MENU** on the remote control. The menu bar will appear at the top of the TV screen.

4 Select 'Installation' using ◄ or ►.

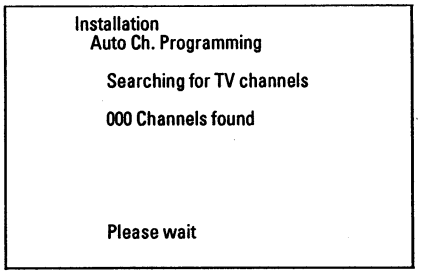
5 Press ▼ continuously to select the line '***Installation***'. (It is on the second screen of menus.) Confirm with ►.

6 Select line '***Auto Ch. Programming***' using ▼ or ▲.

7 Press ►. The automatic TV channel search starts. This allows the DVD recorder to save all available TV channels. This procedure may take several minutes.

8 When the channel search is completed, '***Auto ch. search complete***' will appear on the TV screen.

9 Press **SYSTEM-MENU** repeatedly to remove all the menus from the screen.



× Very few TV channels were found

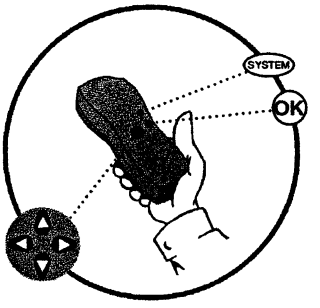
✓ During 'Automatic channel search' the DVD recorder detects whether an antenna or a cable TV signal is connected. If you have connected a cable TV signal but found very few TV channels, you must search the channels manually.

To do so, select '***Cable/Antenna***' insted of line '***Auto Ch. Programming***' in step **6** and confirm with ▶ .
If you select '***Cable***', channels 1-125 will be available. If you select '***Anten.***', channels 2-69 will be available. Select your type of connection by pressing ▶ repeatedly
'***Anten.***', '***Cable***' or ***Auto.***' automatically detects which one you have.
Confirm the setting with **OK**.
Press **SYSTEM-MENU** to go to the next menu. Press **OK** to start channel search as prompted by the on-screen message. When the channel search is complete, press **SYSTEM-MENU** repeatedly to remove all the menus.

Problem

You can read about how to search for a TV channel manually in the following section 'Adding and clearing TV channels manually'.

Adding and deleting TV channels manually



1 Turn on your TV. If required, select the TV's Audio/Video In (or channel 3 or 4).

2 Press **STANDBY** ⏻ to turn on the DVD recorder. Press the **SYSTEM-MENU** button on the remote control. The menu bar will appear on the TV screen.

3 Select 'T' using ◀ or ▶ .

4 Press ▼ repeatedly ▼ to select '***Installation***' and then press ▶ .

5 Select line '***Add/Delete Channels***' using ▼ or ▲ then press ▶ .

6 Using ▼ or ▲ select the TV channel that you want to delete or add.

7 Press ▶ or ◀ to choose '***Add***' or '***Delete***'.

8 Repeat steps **6** to **7** until you have added/deleted all the TV channels you want.

9 To save your channel selections, press **OK**.

Installation
Add/Delete Channels
...

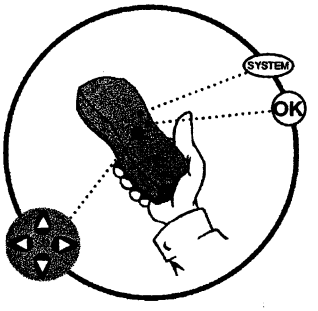
•	Channel 001	Add
	Channel 002	Add
	Channel 003	Delete
	Channel 004	Delete
	Channel 005	Delete
	Channel 006	Delete

...

To exit press
SYSTEM MENU

10 To remove the menus, press **SYSTEM-MENU** repeatedly.

Setting the language



You can select the language for subtitles and audio for DVD playback. Please observe that with some DVDs, you can change the audio language and/or subtitle language only via the DVD disc menu.
Moreover, when recording the sound of a TV channel, you can switch between stereo and an additional language (SAP - Secondary Audio Program). See the following section on Switching audio recording (stereo, SAP).
Plus, you have the option of setting one of the displayed languages for the Recorder's on-screen menu. However, the DVD recorder will only display show text regardless of this setting.

1 Switch on the TV and, if required, select the channel number for the DVD recorder (channel 3 or 4 or Audio/Video In).

2 Turn on the DVD recorder by pressing **STANDBY/ON**.

3 Press **SYSTEM-MENU** on the remote control. The menu bar will appear in the display.

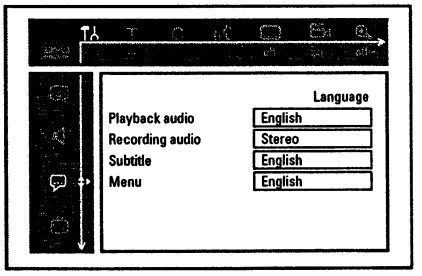
4 Select '⚙' using ◄ or ►.

5 Select the line '***Language***' using ▼ or ▲ then press ►.

6 Select the corresponding line and confirm with ►.

Which settings can I choose?
Playback audio: language for playback (audio language)
Recording audio: type of audio recording '***Stereo***' or '***SAP***'
Subtitle: subtitle language
Menu: language of the Recorder's menu

Tip



7 Select the corresponding setting with ▼ or ▲ and confirm with **OK**.

8 To end, press **SYSTEM-MENU**.

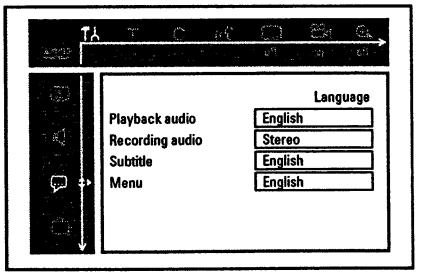
Switching audio recording (stereo, SAP)

Some TV programs broadcast additional audio (SAP - Secondary Audio Program). In most cases this means an additional language is available. For example, if a program is available in English and Spanish, Spanish can be broadcast as the additional audio program (SAP).
In order to record TV programs in stereo or SAP, you can select stereo or SAP as a default setting. This setting will only become active when the sound of a TV program is broadcast in stereo or SAP.
When you playback the recording, you can playback the sound only in the setting you selected for recording (a recording in SAP can be played back only in SAP).

1. Switch on the TV. If required, select the channel number for the DVD recorder (channel 3 or 4 or Audio/Video In).
2. Switch on the DVD recorder with **STANDBY/ON**.
3. Press **SYSTEM-MENU** on the remote control. The menu bar will appear in the display.
4. Select 'T' using ◄ or ►.
5. Select the line '***Language***' using ▼ or ▲ and confirm with ►.
6. Select '***Recording audio***' and press ►.
7. Select '***Stereo***' or '***SAP***' using ▼ or ▲ and confirm with **OK**.

A TV program is only available in '*Stereo*' but my setting is '*SAP*'?

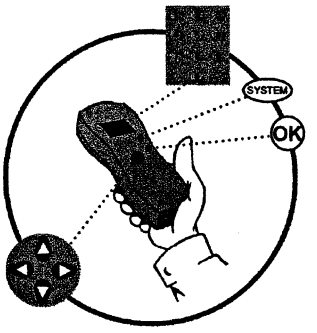
If the setting for '***Recording audio***' is '***SAP***' but the TV channel broadcasts only in stereo during recording, the recording will be done in stereo.



8. To end, press **SYSTEM-MENU**.

VCR Plus+® Guide channel numbers

If you intend to use the VCR+® programming system, you must first assign channel numbers to Guide channel numbers.



1 Press **SYSTEM-MENU** on the remote control. The menu bar will appear in the display.

2 Select '🔧' using ◀ or ▶ .

3 Select line '***Installation***' using ▼ or ▲ and confirm with ▶ .

4 Select the line '***VCR Plus+ Ch.***' using ▼ or ▲ and confirm with ▶ .

5 Use ▼ or ▲ to select the Guide channel number you want to assign to a channel number.

6 Use ◀ or ▶ , or use the number buttons **0..9** to select the channel corresponding to this Guide channel number. An overview of guide numbers/TV channels can be found in your daily newspaper or in your TV listings.

7 Confirm the allocation with **OK** .

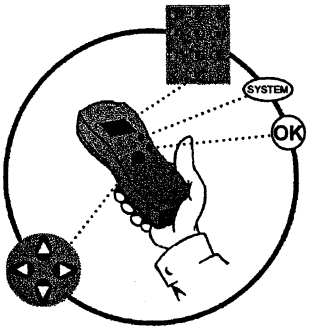
8 To end, press **SYSTEM-MENU** .

Installation
VCR Plus+ Ch.

VCR Plus+ Ch.	Channel
...	
001	---
002	---
003	---
004	---
005	---
...	

To exit press
SYSTEM MENU

Setting the time/date automatically



This function uses the information sent via the local PBS channel to automatically set the time/date. For this reason, you must enter the PBS channel that sends this additional information. When the DVD recorder chooses a wrong PBS channel or the displayed time/date is wrong, you must manually set the date/time (see section 'Manually setting the time & date').

1 Press **SYSTEM-MENU** on the remote control. The menu bar will appear in the display.

2 Select 'T' using ◄ or ► .

3 Select line '***Time/Date***' using ▼ or ▲ and confirm with ► .

4 Select '***Automatic***' with ▼ or ▲ and confirm with ► .

5 Select the corresponding line with ▼ or ▲ .

6 Select the channel which sends the time/date information in the line '***PBS Channel***' and confirm with **OK**. The DVD recorder will check whether or not the information transfer is possible.

Problem

x" will appear on the TV screen
✓ No time/date data can be received from this TV channel.
Select a different channel or '***Auto.***' in line '***PBS Channel***'.

Time/Date
Automatic

PBS Channel	Auto.
Daylight Saving	No
Time Zone	Auto.

To exit press
SYSTEM MENU

7 Select how switching will be done in line '***Daylight Saving***': ('***Auto./Yes/No***').
By selecting '***Auto.***', the time will be automatically set according to the 'summer time' schedule of the PBS channel.

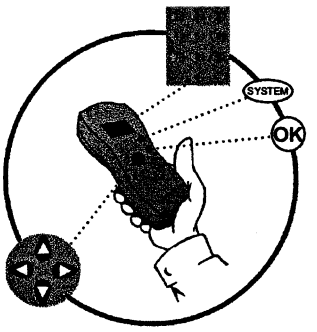
8 In the line '***Time Zone***', select your time zone if the PBS channel entered was for a different time zone. This is the only way to set the time correctly, or, if necessary, to correct it.
If you want to use the time zone of the PBS channel, select '***Auto.***'.

9 Confirm each line with **OK**.

10 To end, press **SYSTEM-MENU**.

The time and date are automatically transferred from the selected 'PBS channel' after the recorder is shut off.

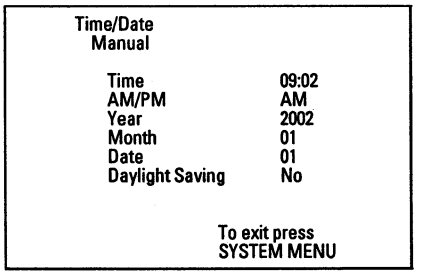
Manually setting the time & date



If the time is incorrect, this could be due to a weak or disrupted TV signal. If this is the case, switch off the automatic function.

1. Press **SYSTEM-MENU** on the remote control. The menu bar will appear in the display.
2. Select 'T' using ◄ or ► .
3. Select line '***Time/Date***' using ▼ or ▲ and confirm with ► .
4. Select '***Manual***' with ▼ or ▲ .
5. Confirm with **OK** .
6. Change the time in line '***Time***' using the number buttons **0..9** on your remote control.
7. Check '***AM/PM***', '***Year***', '***Month***', and '***Date***' in the same way. To select between the fields, use ▼ or ▲ .
   Change the information with ◄ , ► or the number buttons **0..9** .
8. Select one of the following settings in line '***Daylight Saving***':

   '***Yes***': The time set corresponds to the summer time (summer time is on)
   '***No***': The time set corresponds to the winter time (summer time is off)
9. When all settings are correct, confirm with **OK** .
10. To end, press **SYSTEM-MENU** .



5 Information on the TV screen

You can check/change many functions and settings of your DVD recorder via the system menu bar. The menu bar cannot be displayed during recording.

Menu bar icons

The **SYSTEM-MENU** button is used to call up the menu bar (main menu) and to remove it. The ◀ and ▶ buttons are used to select the corresponding function. The ▼ button confirms the function and either leads you to an additional menu or it executes the function.
Depending on the disc inserted, several functions may not be available.

Menu bar 1

	User preferences
T	**Current Title/Track**
	Current Chapter/Index
	Audio Language
	Subtitle Language
	Camera Angle
	Zoom

Menu bar 2

While menu bar 1 is being displayed, you can press ▶ repeatedly to display menu bar 2.

	Sound
	Picture by Picture
	Slow motion
▶▶	**Fast motion**
	Search with time entry

Field for temporary messages

There is a field in the top left corner of the menu bar which displays temporary information regarding different operating functions. This information appears briefly on the screen when certain disc functions are activated.

shuffle	**Shuffle: Shuffle tracks**
scan	**Scan: Play introduction to each track**
disc	**Repeat entire disc**
title	**Repeat current title**
track	**Repeat current track**
chapter	**Repeat current chapter**
A	**Repeat A until end**
A-B	**Repeat A to B**
	Camera Angle
locked	**Child lock on**
resume	**Resume**
	Action prohibited

Status box

The status box displays the current status of the DVD recorder and the type of disc inserted. This display can be turned off.

Disc type icons

DVD+RW	**DVD+RW**
DVD+R	**DVD+R**
DVD-Video	**DVD-Video**
VCD	**Video-CD**
No disc	**No disc**
error	**Disc error**

Disc status icons

●	Recording
■ stop	Stop
▶ play	Playing
❚❚ pause	Pause play
●❚❚ pause record	Pause record
▶▶ 8x	Fast forward (x4)
◀◀ 8x	Fast reverse (x4)
▷ slow	Slow motion

Tuner info box

This box appears in the bottom left corner of the TV screen. It displays the current antenna signal and TV channel.

Y	Current channel / selected device
Y×	**No Signal** TV channel is not available or reception to too weak / Device is not connected or is turned off
Y🔒	Copy protected signal

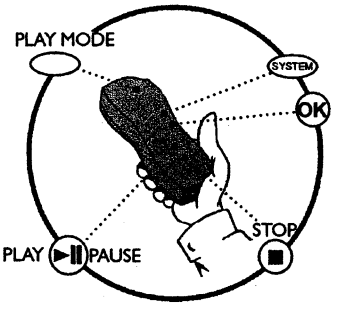
Timer info box

This box is located above the tuner info box. When a recording is programmed (timer), it shows the start time or date of the first recording.
When no timer is programmed, the current time will be displayed.
This box is not displayed during disc playback or recording. However, you can access it during an OTR by pressing **SYSTEM-MENU**.

🕒	Timer set for day shown or time shown (if set for today)
🕒→I	**OTR recording will run until displayed stop time**
🕒	Current time No recording (timer) programmed

6 Playback

General information regarding playback



The DVD recorder can be used with the following systems:
•) DVD Video
•) Video CD or Super Video CD
•) DVD+RW
•) DVD+R
•) DVD-RW (video mode, finalized)
•) DVD-R
•) CD-R
•) CD-RW
•) Audio CD
•) MP3-CD
You can operate the DVD recorder using the remote control or the buttons on the front of the DVD recorder.

Inserting a disc

1 Press the **OPEN/CLOSE** button on the front of the Recorder. The disc tray will open. '*OPENING*' will appear in the display, then '*TRAY OPEN.*'

2 Carefully place the disc into the tray with the label facing up, then press **PLAY/PAUSE ►II** or **OPEN/CLOSE**. '*CLOSING*' then '*READING*' will appear on the display. This indicates the disc is being read.

How do I insert double-sided DVDs?
Double-sided DVDs do not have labels on either side. The label for each side is placed in the middle (on the inner ring). To play a specific side, the label on the side you want to play must be on top.

Opening/Closing the tray using the remote control
You can also use the remote control to open and close the disc tray. To do this, hold down the **STOP ■** button on the remote control until '*OPENING*' (opens) or '*CLOSING*' (closes) appears in the display.

3 Playback may begin automatically.

A menu may appear during playback of a DVD. If the titles and chapters are numbered, press a number button on the remote control. You can also select a menu item with ◄, ►, ▲, ▼ and confirm with **OK**.

DVD VIDEO DVD VIDEO

When playing a DVD+RW, the Index Picture screen appears. Choose the title you want to play with ▼ , or ▲ .
Confirm with **OK** .
For more information, read 'Playing a DVD+RW or DVD+R'.

DVD+ReWritable

If Audio CD playback does not begin automatically, press **PLAY/PAUSE ►II** .
For more information, read 'Playing Audio CDs'.

If '■' is displayed during Video CD playback, begin replay with **PLAY/PAUSE ►II** .
If a menu appears on the screen, select the corresponding menu item with the buttons of the remote control indicated on the screen (PREV= ⏮ , NEXT= ⏭) or with the remote control buttons **0..9** .
For more information, read paragraph 'Playing Video CDs'.

Playing a DVD

× 'PIN' may appear on the display.

✓ The child lock was activated for the inserted disc. Read 'Child lock' and 'Authorizing discs' in the 'Child lock' chapter.

× I see an 'X' in the menu bar on the screen.

✓ DVDs can be manufactured in such a way that certain operations are required or only specific functions are possible during playback. When the 'X' symbol appears on the screen, the selected function is not available.

× I see region code information on the screen.

✓ Because DVD films are usually not released at the same time in all regions of the world, all DVD players are keyed to a specific region code. Discs can be assigned an optional region code. If the region codes of the player and disc do not coincide, playback is not possible.

✓ The region code for a DVD player can be found on a label at the back of the device.

✓ There are no region codes for DVD+Rs or DVD+RWs.

× I am asked to select an option from a menu.

✓ Using ▲ , ▼ , ◄ , ► or the number buttons **0..9** select the corresponding option.
In some cases, you will need to confirm with **OK** .
You can always call up the disc menu with the **DISC-MENU** button on the remote control.

Problem

How can I display disc information?

1 Press the **DISC-MENU** button on the remote control. A menu will appear on the screen. Some films may show a short introductory sequence before displaying the menu.

2 Using ▲, ▼, ◄, ► or the number buttons **0..9** select the corresponding option.
Confirm with **OK**.

Tip

1 If playback does not start automatically, press **PLAY/PAUSE ►II** .
This will appear on the display: title, chapter, elapsed time.

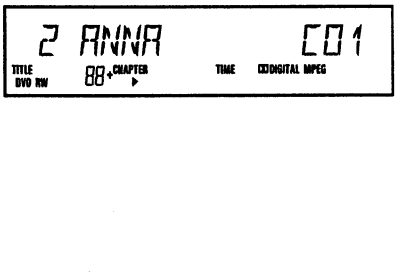
2 To stop playback, press **STOP ■** on the remote control or **■STOP** on the DVD recorder.

3 To eject the disc, press **OPEN/CLOSE** on the front of the DVD recorder.

Playing a DVD+RW or DVD+R

1 If the inserted disc has been write-protected or it is a finalized, DVD+R, playback starts automatically.

2 If playback does not start automatically, select the title you want from the index screen using ▼ or ▲ .
You can also use the ⏮ or ⏭ buttons on the front of the Recorder to select a title.



3 Press the **PLAY/PAUSE ►II** button.
This will appear on the display: Title number, recording mode, elapsed playing time.

Problem

***I see the message 'EMPTY DISC' on the display**
✓ There are no recordings on this disc.

4 To stop playback, press **STOP ■** on the remote control or **■STOP** on the DVD recorder.

5 To eject the disc, press **OPEN/CLOSE** on the front of the DVD recorder.

When I play recordings that have been recorded in different recording modes, do I have to change each manually?

During playback, the device will automatically switch to the proper mode '***HQ***(*HQ*), ***SP+***(*SP+*), ***EP***(*EP*), ***EP+***(*EP+*)'.
For more information, please read the section 'Selecting the recording mode (quality)' in the chapter 'Manual recording'.

Playing audio CDs

You can also use the DVD recorder to pay audio CDs

1 Insert an audio CD. Playback starts automatically.

Audio CD display

If the TV is turned on, the Audio CD display will appear on the screen.

During playback, the number of the current track will be shown on the screen and display.

2 Stop playback with **STOP** ■ . Track number and total play time are displayed.

Playing MP3 CDs

MP3 (MPEG1 Audio Layer-3) files are highly compressed pieces of music. This enables you to fit up to 10 hours of CD quality music on a single CD-ROM.

When creating MP3 CDs, keep the following in mind:
Data system supported: ISO9660, Joliet
Format supported: *.mp3
File names 6a ASCII characters max. (Joliet)
Maximum of 99 albums, 999 titles
Sampling frequency supported: 44.1kHz, 48kHz. Music pieces with different frequencies will be skipped.
Bit rate supported: 32, 64, 96, 128, 192, 256 (kbps)
ID3 Tag: Version 1, 1.1. In the case of later versions, the directory name will appear as the album and the file name as the title.

1 Insert a MP3 CD. Playback starts automatically. (See additional instructions on the next page.)

MP3 CD display

If the TV is turned on, the MP3 CD display will appear on the TV screen.

During playback, the number of the current track will be shown on the screen and display.
During interrupted playback, the number of albums will be shown on the TV and on the CD's display.

If availableon the CD, album, track, and artist may appear on the display.

Tip

2 Stop playback with **STOP ■** . The number of albums appears on the display.

Other playback functions

Select the beginning of the current track or the previous or next track with **|◄◄** or **►►|** .

You can also use **T/C** to select tracks and albums.

1 Press **T/C** and then select symbol 'T' for album or 'C' for track with **►** or **◄** .

2 Select the number of the album/track with **▼** , **▲** or the number buttons **0..9** on the remote control.

You can also use repeat functions (**PLAY MODE**).

Tip

Playback of a (Super) Video CD

(Super) Video CDs may feature 'PBC' (Play Back Control). This allows the direct selection of special playback functions (menus). The Video CD must be PBC-compatible (see CD packaging). 'PBC' is turned on by default.

1 Insert a (Super) Video CD.
If the '■' appears on the display, begin playback with **PLAY/PAUSE ►II** .

2 If a menu appears on the screen, select the corresponding menu item with the buttons of the remote control indicated on the screen (PREV= **|◄◄** , NEXT= **►►|**) or with the remote control buttons **0..9** . Using the buttons, select the corresponding menu item until playback starts.
If the PBC menu contains a title list, the desired title can be chosen directly.

3 The **RETURN** button will take you back to the previous menu.

4 Stop playback with **STOP ■** .

7 Other playback functions

Changing to a different chapter track/title

When a disc contains more than one track, title, or chapter, you can change to a different track, title or chapter as follows. However, if a title contains several chapters, these are selected. Title selection is then possible via the menu bar only.

1 During playback, you can go to the next title/chapter/track using the ▶▶| button. Using the |◀◀ button, you can return to the start of the current title/chapter/track. Using the |◀◀ button, you can return to the start or the previous title/chapter/track.

Tip

Using the T/C (title/chapter) button

1 Press the **T/C** (title/chapter) button and select the corresponding title with ▲ or ▼ .
Make sure that the 'T' (title) icon is selected in the menu bar.

2 You can also select a chapter within a title using the **T/C** button.
Press **T/C** and select 'C' (chapter) using ▶ .
Then select the corresponding chapter with ▲ or ▼ .

Disc search

You can fast forward a disc at four or 32 times normal playback speed. You can select other speeds only via the menu bar (▶▶).

1 During playback, hold down |◀◀ (reverse) or ▶▶| (forward) to switch to the search function. You can switch between different speed modes using the |◀◀ / ▶▶| buttons.

2 To continue playback, press **PLAY/PAUSE ►II** twice at the desired position.

Problem

× No sound

✓ During search the sound is turned off. This is not a fault in your machine.

Tip

Search function via menu bar

1 Press **SYSTEM-MENU** on the remote control during playback. The menu bar appears at the top of the screen.

2 Select the '▶▶' symbol on the second menu bar using ▶ or ◀ and confirm with ▼ .

3 Now you can select different search speeds forwards or backwards using ◀ or ▶ .

4 If necessary, switch off the menu bar using **SYSTEM-MENU** .

5 To resume playback, press **PLAY/PAUSE ►II** twice.

Still picture

1 During playback, press **PLAY/PAUSE ►II** to stop playback and display a still picture.

Still picture features via the menu bar

1 While playback is paused, press the **SYSTEM-MENU** button on the remote control. The menu bar will appear at the top of the screen.
2 Select '◄▯►' in the second menu bar with ► or ◄ then press ▼ .
3 You can now move the still picture forward or backward using ◄ or ► .
4 If necessary, remove the menu bar with the **SYSTEM-MENU** button.

2 To continue playback, press **PLAY/PAUSE ►II** .

Slow motion

1 Press **PLAY/PAUSE ►II** on the remote control during playback. Then hold down **|◄◄** or **►►|** to switch to slow motion.

2 You can switch between the different speeds with **|◄◄** or **►►|** .

Slow motion via menu bar

1 During playback, press the **PLAY/PAUSE ►II** button and then the **SYSTEM-MENU** button on the remote control. The menu bar will appear at the top of the screen.
2 Select '▷' with ► or ◄ and confirm with ▼ .
3 You can now move forwards or backwards at different speeds using ◄ or ► .
4 If necessary, turn off the menu line with the **SYSTEM-MENU** button.

3 To continue playback, press **PLAY/PAUSE ►II** twice.

Search with time entry

Using this function, you can start playing a disc at a specific time.

1 During playback, press the **SYSTEM-MENU** button on the remote control. The menu bar will appear at the top of the screen.

2 Select '⏲' with ▶ or ◀ and confirm with ▼ . The playback is stopped and the screen displays how much play time has already expired (playback time).

3 Enter the desired start time for the playback using the number buttons **0..9** .

4 Confirm with **OK** .

Problem

*** The time that I entered is blinking on the screen**

✓ The selected title is shorter than the time entered. Enter a new time or cancel the function with **SYSTEM-MENU** .

5 Playback will now start at the time you entered.

Repeating/Shuffle

You can select an entire section or the entire disc for repeat playback. Depending on the disc type (DVD-Video, DVD+RW, Video-CDs), you can select chapters, titles or the entire disc.

1 Select the desired chapter, title or disc and start playback.

2 During playback, press **PLAY MODE** . By pressing **PLAY MODE** again, you can select from the following options:

- •) '↻ chapter': Repeat chapter (DVD only)
- •) '↻ title': Repeat track/title
- •) '↻ repeat': Repeat entire disc (video CD, audio CD only)
- •) '⇄ shuffle': Shuffle
- •) No display: no repeat

3 To cancel the repeat, press **STOP ■** .
You can also keep pressing **PLAY MODE** until the displays disappear.

Repeat a specific segment A-B

You can repeat a specific segment within a title/chapter/track. To do this, you must mark the start and end of the desired segment.

1. During playback, press the **PLAY/PAUSE ►II** at the desired starting position. sYou will see a still picture.
2. Keep pressing **PLAY MODE** until the '—A—' symbol appears on the TV screen. This will store the start point.
   Start playback with **PLAY/PAUSE ►II** .
3. At the desired stop point, press the **OK** button. '—A-B—' appears on the TV screen. Playback will now resume repeating the selected segment.
4. To cancel the repeat, press **STOP ■** .
   You can also keep pressing **PLAY MODE** until the displays disappear.

Scan function

Using this function, you can play the first 10 seconds of each chapter (DVD) or track (CD or VCD) on the disc.

1. During playback, press **PLAY MODE** repeatedly until '—scan—' appears on the screen.
2. After 10 seconds, the DVD recorder will switch to the next chapter/track. To resume the playback at the corresponding chapter/track, press **STOP ■** and then **PLAY/PAUSE ►II** .

Zoom function

Using this function, you can enlarge the video image and pan through the enlarged image.

1 During playback, press **PLAY/PAUSE ►II** . You will see a still picture.

2 Press the **SYSTEM-MENU** button and select '🔍' using ▶ .

3 Use ▼ or ▲ to select the desired zoom factor.

4 As soon as '***press OK to pan***' appears, the zoom process is complete.

5 Press **OK** . Use ▲ , ▼ , ▶ , and ◀ to select an area of the image that you want to look at more closely.

6 Confirm with **OK** .

7 To stop zooming, press **PLAY/PAUSE ►II** and then **SYSTEM-MENU** .

Camera angle

If a disc contains video sequences that were recorded with different camera angles, you can select different angles for playback.

1 During playback, press **PLAY/PAUSE ►II** . You will see a still picture.

2 Press the **SYSTEM-MENU** button and select '📹' using ▶ .

× The '📹' icon cannot be selected.

✓ The selected scene was only recorded with one camera angle. This function is, therefore, not available. For more information, please read the label of your DVD.

Problem

3 Select the desired angle with ▼ or ▲ . You can also directly enter the angle number with the number buttons **0..9** .

4 After a short pause, playback will resume from the new angle. The '📹' icon will remain visible until a section starts that only has one camera angle.

Changing audio language

DVDs sometimes come in different languages. The language used for playback is the one that you selected during initial installation of the Recorder or the default language of the DVD. However, you can change the audio language of a disc at any time.
Please note that the audio language can be changed via the menu (**DISC-MENU** button) of the inserted disc as well as via the Recorder's menu bar (**SYSTEM-MENU** button). It is possible for the audio languages of the two menus to be different. Some DVD's only allow you to change the language in the DVD menu.

1 Press the **SYSTEM-MENU** button during playback and select '((ζ' using ▶ .

2 Use ▼ or ▲ to select the desired audio language. You can also directly enter the number with the number buttons **0..9** .

3 Playback will now resume with the new audio language.

Subtitles

DVDs sometimes come with different subtitle languages. The language used for playback is the one that you selected during the initial installation or the default of the DVD. However, you can change the subtitle language of a disc at any time.
Please note that the subtitle language can be changed via the menu (**DISC-MENU** button) of the inserted disc as well as via the Recorder's menu bar (**SYSTEM-MENU** button). It is possible for the subtitle languages of the two menus to be different.

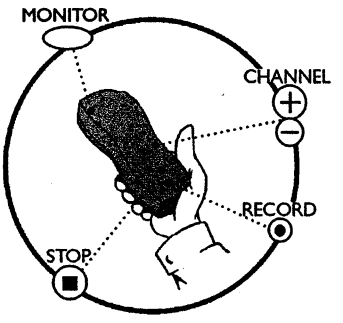
1 Press the **SYSTEM-MENU** button during playback and select '▭' using ▶ .

2 Select the desired subtitle language using the ▼ or ▲ . You can also directly enter the number with the number buttons **0..9** .
You can shut the subtitles off with Number button s **0** or by selecting '***off***'.

3 Playback will now resume with the new subtitle language.

8 Recording

General information



What kind of discs can be used for recording?

You can used two different types of DVDs with this DVD recorder:

DVD+RW

This disc can be recorded on and then erased.

DVD+R

This disc can only be recorded on once.

For this DVD to be played in a DVD player, it must be finalized. After this is done, no more recordings can be added to this disc.

If this disc is only to be played in the DVD recorder, then it does not have to be finalized. Recordings can be added and then deleted. However, the location (playing time) of the deleted recording (title) will no longer be available. See page 55 for details on finalizing discs.

You can make a spontaneous recording (for example, a program currently being shown) by following the steps.

To do this, select the title to be overwritten or choose an '***Empty title***' in the 'index screen' with the ▼ , ▲ buttons.

If the recording is to be inserted between existing recordings, please note the length of the old and new recording. If the new recording is too long, the recording (title/chapter) following it will be overwritten.

Adding new recordings after the end of all recordings (Safe Record)

To add a new recording after the last recording on a disc, press and hold the **REC/OTR ●** button until '*SAFE REC*' appears in the display.

For DVD+R, each new recording is always placed after all previous recordings since previous recordings cannot be overwritten.

Tip

If you want to start and stop a recording manually, read the section **'Recording without automatic switch-off'**.

Please refer to 'Recording with automatic switch-off'. If you want to start a recording manually and continue recording for a specific amount of time. This permits accidentally recording to the end of the disc.

If the end of a disc is reached during recording, recording will stop and the Recorder will turn itself off automatically.

Recording without automatic switch-off

1 Switch on the TV and, if required, select the channel number for the DVD recorder (channel 3 or 4 or Audio In channel).

2 Insert a disc to be used for the recording. The system and content of the disc will be checked. 'READING' will appear on the display.

***Index display**

✓ A DVD+RW was inserted that already contains recordings. Use ▲ and ▼ to select a location where the recording should be started.

***'EMPTY DISC' appears in the display.**

✓ The inserted DVD is empty.

***A dialog box appears asking if the contents should be erased or the disc should be ejected.**

✓ The inserted disc is a DVD+RW whose contents are not compatible with DVD Video (e.g. a data disc). This disc cannot be used for recordings until the entire disc is erased using the **REC/OTR ●** button.

***'*Too many titles*' appears on the screen when a recording is attempted.**

✓ A disc can only contain a max. of 48 titles (including the empty titles). Erase the titles or change the disc.

Problem

3 If necessary, switch to TV programming by pressing the **MONITOR** button on the remote.

4 Use **CHANNEL +** or **CHANNEL −** to select the channel (station name) you want to record. This will appear on the display:

Channel number of the external inputs:

'EXT2' SVHS jack (Y/C) **IN S-VIDEO (Y/C)** Video jack (CVBS) **IN VIDEO (CVBS)**. Audio jack **IN L AUDIO R** for SVHS-jack and Video jack.

Switching between jack **IN S-VIDEO (Y/C)** and **IN VIDEO (CVBS)** is done automatically. In case both jacks are occupied, the signal at jack **IN S-VIDEO (Y/C)** is given priority.

'EXT1' Component Video jacks on the back **IN COMPONENT VIDEO**. Audio jacks **IN AUDIO L R** for Component Video

'FRM1' SVHS-/Audio front jacks **S-VIDEO / left AUDIO right**

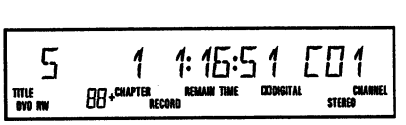
'FRM1' Video/Audio front jacks A/V **VIDEO / left AUDIO right**

Switching between jack **S-VIDEO** and **VIDEO** is done automatically. In case both jacks are occupied, the signal at jack **S-VIDEO** is given priority.

Tip

5

To start recording, press **REC/OTR ●** on the remote control or **RECORD** on the DVD recorder. To start the recording after all other recordings on the disc, press and hold the **REC/OTR ●** button until 'SAFE REC' appears in the display.
For DVD+Rs, each recording is always started after all previous recordings since previous recordings cannot be overwritten.
The display panel will appear similar to the example shown at right.



Tip

Inserting chapter markers

During recording, scenes can be marked so they can be found or hidden later.
During recording, press **EDIT** at the desired location. '***Inserting marker***' appears on the TV screen. In the display, the number of 'CHAPTERS' is increased by one.
For more information about title/chapter, please read the section 'Changing to a different title/chapter' in the chapter 'Playback'.

6

You can stop recording by pressing **STOP ■** on the remote or **■STOP** on the recorder. 'MENU UPDT' will appear on the display. The DVD recorder is preparing the list of contents. Wait until this message disappears in the display, then the recording is completed.

Problem

× If display reads 'DISC ERR'

✓ The recording could not be completed correctly because of a disc error. Check and clean the inserted disc if necessary.

Tip

Making recordings on DVD+R discs compatible

If you want to playback recordings on a DVD player, you must first finalize the disc in the DVD recorder. You can use the '***Finalizing***' function on the DVD so that it can be read by the DVD player without problem. Please read paragraph 'Finalizing DVD+R discs' in the chapter 'Managing disc content'.

Pausing recording

1 During recording, press the **PLAY/PAUSE ►II** button.

2 To continue recording, press **REC/OTR ●**.

Ending recording

To stop recording, press the **STOP ■** button. Wait until *'MENU UPDT'* disappears from the display before you try another feature.

Tip

Recording with automatic switch-off (OTR one-touch-recording)

1 Insert a disc.

2 Use **CHANNEL +** or **CHANNEL −** to select the channel you want to record.

3 Press **REC/OTR ●** on the remote control repeatedly . Each time you press **REC/OTR ●** you will add 30 minutes to the recording time.

4 To check the remaining recording time while an OTR is in progress, press SYSTEM MENU. The time at which the recording will end will appear on the TV screen in the timer info box. To stop an OTR, press **STOP ■**.

How can I delete the recording time I just entered?

To delete an entry, press **CLEAR** while the display shows the recording time.

?

Preventing accidental erasing of discs

You can lock the entire disc to prevent important recordings from being erased by accident. You can only lock the entire disc. It is not possible to lock individual recordings.

What happens with DVD+R discs?
As long as these discs have not been finalized, you can protect them against being overwritten just like DVD+RW.

1 Put the disc to be locked into the recorder.

2 Press **DISC-MENU** to see the Index Picture Screen if necessary.

3 While the Index Picture Screen is displayed, press **STOP ■** on the remote control. The first title is selected.

4 Press ▲ . The disc information screen is displayed.

5 Press the ▶ button.
Select the line Protection with the up or down arrow.
Confirm with ▶ .

6 Select '***Protected***' using ▼ and confirm with **OK** .

7 Press ◀ , then press **DISC-MENU** to play the disc.

The entire disc is now protected. If you attempt a recording, 'DISC LOCK' will appear on the display and '***Disc locked***' will appear on the TV screen.
Tip: If you later decide to record on the disc, follow these steps but select Unprotected at step 6.

Lining up recordings within a title (assemble cut)

You can add further recordings to a title already contained on a DVD+RW. The new recording will be added to the title as a chapter. Previous information will be overwritten from this location onward. Depending on the length of the recording, this will also overwrite titles that follow the current title. The recording mode (quality) is automatically transferred from the current title.
To play back this recording, press **SYSTEM-MENU** and select 'C' (chapter) using ▶ . You can also use **T/C** .

For more information, read section 'Changing to a different title/chapter' in chapter 'Playback'.

What happens with DVD+Rs?
New recordings on DVD+R can only be made on existing space. You cannot overwrite existing recordings on 'DVD+R' discs.

1 Find the title in which the new recording is to be inserted.

2 Look at the last minute of the old recording.

3 Press **PLAY/PAUSE ►II** on the remote control at the location where the new recording is to start. '**II** ' will appear on the TV screen.

4 If you want to monitor the recording, you can switch to the internal tuner using the **MONITOR** button.

5 Now start recording as usual by pressing **REC/OTR ●** on the remote control.
The new recording is added.

6 Stop recording with **STOP ■** .

Selecting the recording mode (quality)

By selecting a recording mode, you define the picture quality of recordings and the maximum recording time for a disc.
You can check the quality by switching to a recording mode watching the picture via the built-in tuner. (Press the **MONITOR** button).
For playback, the correct picture quality will automatically be selected.

1 Switch on the TV. If required, select the channel number for the DVD recorder (channel 3 or 4 or the Audio/Video In channel).

2 On the front of the DVD recorder, select the desired recording mode using the **REC MODE** button.
You can also use the **REC. MODE** button on the remote control.

Which recording modes can I choose?

'*HQ/HQ*': HighQuality offers the best picture quality with a total recording time of 60 minutes.

'*SP+/SP+*': StandardPlay (better than S-VHS picture quality) offers excellent picture quality with a total recording time of 150 minutes.

'*EP/EP*': ExtendedPlay (better than VHS picture quality). Total recording time of 240 minutes

'*EP+/EP+*': ExtendedPlay (VHS picture quality). Total recording time of 360 minutes.

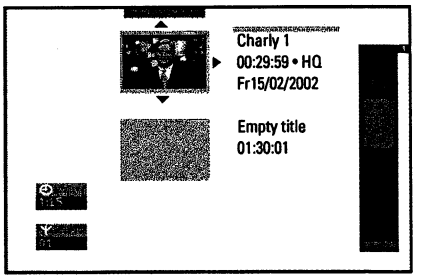
Can I also change the recording mode via a menu?

1. Press the **SYSTEM-MENU** button.
2. Select '⚙' using ◀ or ▶ .
3. Select '***Record settings***' (in the second screen of menus) using ▼ or ▲ then press ▶ .
4. At '***Rec Mode***,' select the recording mode using ◀ or ▶ .
5. Confirm with **OK** then press **SYSTEM-MENU** .
6. If you select the '*EP/EP*' or '*EP+/EP+*' recording modes, you can select the '***Stndrd***' (standard) or '***Sport***' (for quick movements) settings in the '***Filter mode***' line.

Tip

9 Managing disc content

General information



When a recording is made on a disc, the following information is saved at the start of each recording:
•) Name of the recording
If no name is sent by the broadcaster, then
the channel number (channel name) and time the recording started is saved as the name
•) Length of recording
•) Recording mode (quality)
•) Date of the recording
•) Recording index screen

If '***Auto chapters***' is turned on in the '***Record settings***' menu, a marking will be made every 5-6 minutes. These markers are called chapter markers.

Can markings also be made on DVD+Rs?
Markings can be made on these discs as long as they have not been finalized.

Read 'Disc settings' to change general settings of the disc.

Read **'Editing recording titles (name)'**to learn how to change recording names.

Read 'Playing the entire title' to learn how to play the entire title.

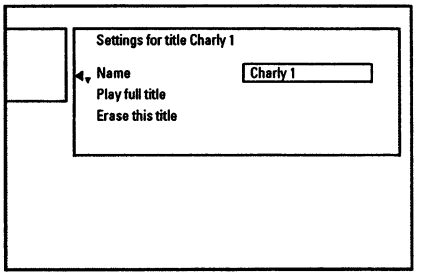
Read **'Deleting recordings/titles'**to learn how to erase the title.

Read 'Edit menu' to learn how to make a new index picture.

Editing recording titles (name)

Some TV stations transmit the name of a program. In this case, the name may be included automatically (e.g. 'ROCKY'). Otherwise, the date and time of the recording are stored as the name. The name of the recording can only be changed after the recording has been completed.

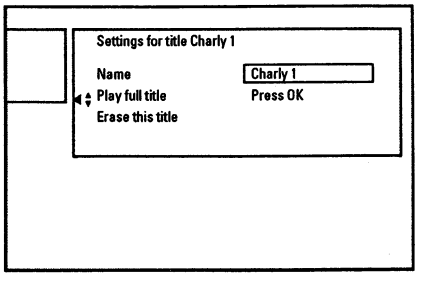
1. Press **STOP ■** to stop playback if necessary.
2. Using ▲ or ▼, select the title you want to edit and confirm with ▶. The settings menu for that title will appear.
3. Select '***Name***' using ▲ or ▼ and confirm with ▶.
4. Using ▶ or ◀, select the position where the letter/number/symbol is to be changed.
5. Change the desired symbol using ▲ or ▼. You can switch between uppercase and lowercase letters with the **SELECT** button. You can delete a character with the **CLEAR** button.
6. Repeat steps **4** and **5** until you have made the desired changes.
7. Save the new name with **OK**. '***Storing name***' appears on the TV screen for confirmation.
8. To end, press ◀.



Playing the entire title

If you have hidden certain chapters of a title, with this setting you can view the entire title including the hidden chapters. Proceed as follows:

1. Press the **STOP ■** button to stop playback if necessary.
2. Using ▲ or ▼ select the title that you want to play back then press ▶. The settings menu appears.
3. Select '***Play full title***' using ▲ or ▼ and confirm with **OK**.
4. Playback begins automatically. The full title - including the hidden chapters - is played.



Deleting recordings/titles

You can erase selected recordings from a disc. To do this, proceed as follows:

1 Press **STOP** ■ to stop playback if necessary.

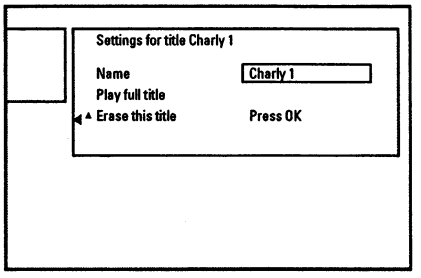
2 Using ▲ or ▼ to select the title to be deleted then press ▶ . The settings menu will appear.

3 Select '***Erase this title***' using ▲ or ▼ and **OK**. '***This will completely erase this title***'. '***Press OK to confirm***' will appear on the screen.

4 If you want to delete this title, confirm with **OK**. Otherwise, press ◀ .

5 '***Erasing title***' will appear on the screen.

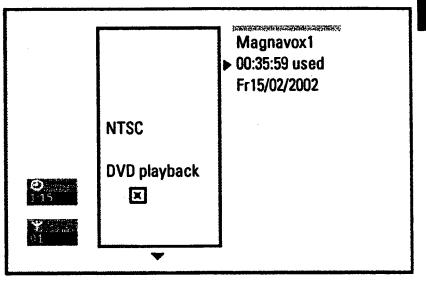
6 An '***Empty title***' box will now appear at this location in the index picture screen. New recordings can now be added at this location.
If the deleted title was too short (less than one minute), no '***Empty title***' will appear at this point.



Can titles also be deleted on DVD+Rs?

Titles on DVD+R are marked as deleted. '***Deleted title***' appears on the TV screen instead of '***Empty title***.' During playback the deleted title will be skipped. The location on the disc used for this title cannot be reused since the title has not been physically deleted. After a disc has been finalized, no further changes can be made.

Disc settings



This display is located **before** the first title and contains general information about the inserted disc.

You can:
•) change the disc name
•) protect or unprotect a disc
•) finalize editing (make DVD compatible)
•) finalizing DVD+Rs
•) Erase DVD+RWs

To show this display, proceed as follows:

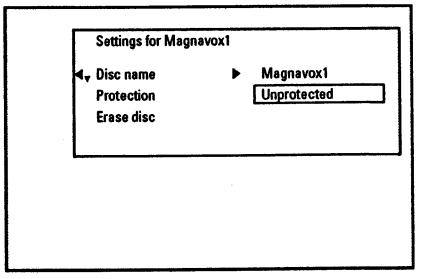
1 Press **STOP** ■ to stop disc playback if necessary.

2 Select the first title with ▲ or press **STOP** ■ again.

3 Press the ▲ button. The disc information screen will appear.

Changing disc name

1 Press ▶ in the 'Disc info display'. The '***Settings for***' menu will appear on the screen.



2 Select the '***Disc name***' line using ▲ or ▼ and confirm with ▶ .

3 Using ▶ or ◀ select the position where the letter/number/symbol is to be changed/re-entered.

4 Change the desired symbol using ▲ or ▼ . You can switch between uppercase and lowercase letters with the **SELECT** button. You can re-delete a character with the **CLEAR** button.

5 Repeat step 3 and step 4 until you have made the desired changes.

6 Save the new title with **OK** . '***Storing name***' appears on the TV screen for confirmation.

7 To end, press ◀ .

Finalize editing

If one or more titles have been edited, it is possible that another DVD Player will display the original titles. You can prepare your disc so a DVD player willplay the edited version.

1 Press ▶ in the 'Disc info display'. The '***Settings for***' menu will appear on the screen.

2 Select the line '***Make edits compatible***' using ▲ or ▼ and confirm with **OK**.

Problem

***The line '*Make edits compatible*' does not appear**

✓ Your disc is already compatible. It does not need to be converted. To end, press **SYSTEM-MENU**.

3 '***This will take...***' will appear on the screen to show how long this process will last.

4 To confirm, press **OK**. '***Working...***' will appear on the TV screen. A bar moving from left to right will show the progress of the conversion.

Finalizing DVD+R discs

This function is necessary so that a DVD+R can be played in a DVD player. When this function is completed, no further recordings or changes can be made to the disc.

1 Press ▶ in the 'Disc info display'. The '***Settings for***' menu will appear on the screen.

2 Select '***Finalize disc***' using ▲ or ▼ and **OK**.

Problem

***'*Finalize disc*' does not appear in the display.**

✓ Either no DVD+R was inserted or the disc has already been finalized. To end, press **SYSTEM-MENU**.

***The '*Settings for*' menu does not appear**

✓ If the disc was made on another DVD recorder, it is possible that this menu cannot be opened. In this case, use the '***Finalize disc***' function in the 'T' menu, submenu '***Features***'.

3 '***This will take...***' will appear on the screen to show how long this process will last.

4 To confirm, press **OK**. '***Working...***' will appear on the screen. A bar moving from left to right will show the progress of the process.

Erasing DVD+RWs

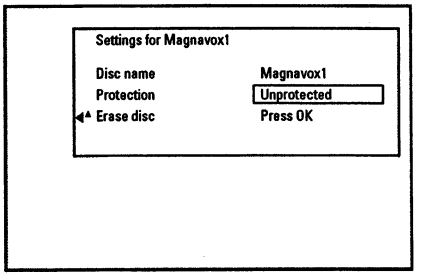
1 Press ▶ in the 'Disc info display'. The '***Settings for***' menu will appear on the screen.

2 Select ***Erase disc***using ▲ or ▼ and press **OK**. '***This will erase all titles' Press OK to confirm***' appears on the screen.

3 If you want to delete all titles, confirm with **OK**. Otherwise, press ◀.

4 '***Erasing disc***' will appear on the TV screen.

5 After the disc has been successfully erased, the index picture screen will be empty. Tip: If the disc is empty already, you cannot select Erase disc.



Edit menu

In this menu, you can adjust a title to your personal preferences. You can insert/delete chapter markers or split the title. Display this menu during playback using **EDIT** on the remote control.

Changing the index picture

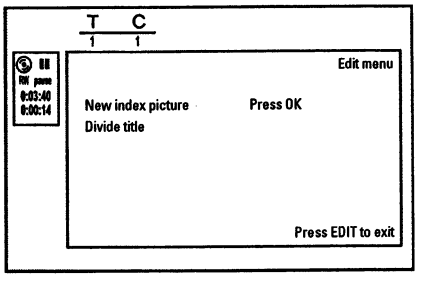
Normally, the first frame of a recording is shown as the title's index picture. You can, however, use any picture as an index picture.

1 During playback, find the location that you want to use as the new index picture. Press the **PLAY/PAUSE ►II** button to pause play.

2 Press the **EDIT** button. The '***Edit menu***' menu will appear on the screen.

3 Select '***New index picture***' and confirm with **OK**.

4 Press **OK** again to confirm. '***Updating menu***' appears on the TV screen.



When successfully completed, the DVD recorder automatically brings you back to the index picture screen.

Splitting titles

A title can be split into several parts (titles) no matter how large. Each of these parts (titles) is characterized by its own index picture.
Warning! Once a title is split, it cannot be reversed.

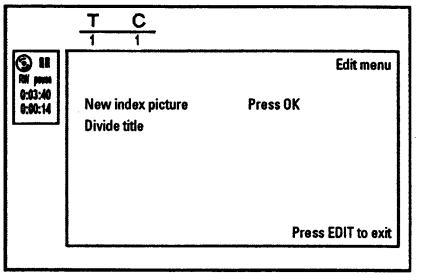
Can I also divide titles on DVD+Rs?
Because recordings on DVD+Rs cannot be overwritten, it is not possible to divide titles.

1 During playback, press **EDIT** on the remote control. The '***Edit menu***' menu will appear on the screen.

2 Press ▼ to select '***Divide title***' and confirm with the **OK** button.

3 If you are certain, start the process with **OK**. '***Dividing title***' will appear on the screen.

4 Wait until the new title is displayed with an index picture in the index picture overview.

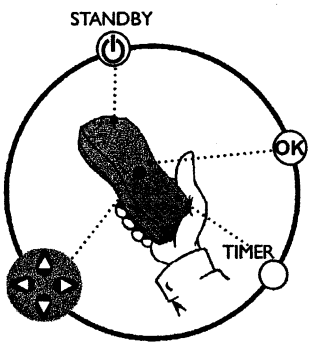


This completes this process.

10 Programming a recording (TIMER)

ENGLISH

General information



Use programmed recording (TIMER) to automatically start and stop a recording at a later date. The DVD recorder will switch to the right program number and begin recording at the correct time.
With this DVD recorder, you can pre-program up to six recordings within a period of one year.

To make a programmed recording, your DVD recorder needs to know:
* the date you want to make the recording
* the TV channel numbel
* the start and stop times of the recording
* the recording mode (***'HQ/SP+/EP/EP+'***)

This information is saved in a 'TIMER block.'

Before you begin, makee sure the clock is set. If the clock is not set, the Set Clock menu will appear when you press the TIMER button.

Programming a recording (with VCR Plus+® system)

Thanks to this programming system, you no longer need to tediously enter the date, TV channel, start and end times. All the information needed for programming is contained in the PlusCode channel number. This PlusCode number is found in most TV listings for magazines.

1 Switch on the TV. If required, select the channel number for the DVD recorder (channel 3 or 4 or the TV's Audio/Video In channel).

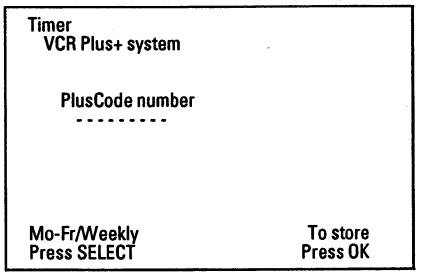
2 With the Recorder on, press **TIMER** on the remote control.
The programming method selected last is marked.

3 Select line ***'VCR Plus+ system'*** using ▼ or ▲ and confirm with ▶ .

4 Enter the entire PlusCode number. This number is up to 9 digits long and can be found next to the start time of the TV program in your TV listings magazine.
e.g.: 5-234-89 or 5 234 89
Enter 523489 for the PlusCode number.
If you make a mistake, you can clear your instructions with **CLEAR** .

Selecting daily/weekly recordings
Using **SELECT** , select from the following options:
'Mo-Fr': Repeated daily recordings from Monday to Friday.
'Weekly': Repeated weekly recordings (every week on the same day).

Tip



5 Confirm with **OK**.

* **The following message appears on the screen: '*Please enter channel number*'**

✓ The channel number of the TV channel has not yet been assigned Guide. Using ▶, ◀ or the number buttons **0..9** on the remote control, select the corresponding Guide channel number (name) of the TV channel and confirm with **OK**.

* **The following message appears on the screen: '*PlusCode number wrong*'**

✓ The entered PlusCode number is incorrect. Correct your entry or cancel using the **SYSTEM-MENU** button.

✓ Check the time/date (see chapter 'Initial installation', section 'Setting the time and date').

* **The following message appears on the screen: '*Date does not match Mon-Fri*'**

✓ A daily recording was entered for the wrong day. Daily programming can only be used for recordings to be made from Monday to Friday.

Problem

6 The data appears after confirmation. You can go back to change the data. Select the field with ▶ or ◀. Change the information with ▲, ▼ or the number buttons **0..9**.

Changing recording mode in the '*Rec Mode*' input field

Select the '***Rec Mode***' input field using ▶. Using ▼, ▲ select the recording mode '***HQ, SP+, EP, EP+***'.

Tip

Timer
VCR Plus+ system

Date	Ch.	Start	End	Rec Mode
01/22	001	08:30AM	10:00PM	HQ

To store
Press OK

7 If all information is correct, press the **OK** button. The programming information is stored in a TIMER block.

8 To end, press **TIMER**.

9 Insert a recordable disc in the Recorder.

10 Switch off the Recorder with **STANDBY** ⏻.
The programmed recording will only function properly when the DVD recorder has been **switched off** using the **STANDBY** ⏻ button.

If any of the TIMER blocks are in use and the recordings are set ot occur, '⏲' will light up on the display.

Programming a recording (without VCR Plus+® system)

1 Switch on the TV. If required, select the channel number for the DVD recorder (channel 3 or 4 or the Audio/Video In channel).

2 With the Recorder on, press **TIMER** on the remote control.

3 Select '***Timer Programming***' using ▼ or ▲ and confirm with ▶ .
The information will appear on the screen.

4 Select an item (date, channel, start, end, or Rec mode) with ◀ or ▶ .

5 Enter information with ▼ or ▲ or with the number buttons **0..9** .

6 For '***Date***', enter the month and then the date.

Timer
Timer Programming

Date	Ch.	Start	End	Rec Mode
01/22	01	08:30AM	10:00PM	HQ

Mo-Fr/Weekly Press SELECT
To store Press OK

Selecting daily/weekly recordings

While date is selected, use **SELECT** to choose from the following options:
'***Mo-Fr***': Repeated daily recordings from Monday to Friday
'***Mo***': Repeated weekly recordings (every week on the same day, e.g. Monday).

Program numbers of the '*EXT1*' and '*EXT2*' cinch socket

You can also program recordings from external sources via **EXT 1 TO TV-I/O** ('***EXT1***') or **EXT 2 AUX I/O** ('***EXT2***').

Changing recording mode in the '*Rec Mode*' input field

Select the '***Rec Mode***' input field using ▶ .
Using ▼ , ▲ select the recording mode '***HQ***, ***SP+***, ***EP***, ***EP+***'.

Tip

7 If all information is correct, press the **OK** button. The information is stored in a TIMER block.

8 To end, press **TIMER** .

9 Insert a recordable disc in the Recorder.
The disc is checked.

10 Switch the Recorder off with **STANDBY** ⏻ .
The programmed recording will only function properly when the DVD recorder has been **switched off** using the **STANDBY** ⏻ button.

If any of the TIMER blocks are in use, '⏲' will light up on the display.

How to check, change, or delete a programmed recording (TIMER)

1 Switch on the TV. If required, select the channel number for the DVD recorder (channel 3 or 4 or the Audio/Video In channel).

2 With the Recorder on, press **TIMER** on the remote control.

3 Select '***Timer List***' using ▼ or ▲ and confirm with ▶ .

4 Select the programmed recording you want to check, change, or delete with ▼ or ▲ .

Delete programmed recording

1 Press the **CLEAR** button.
2 Confirm with **OK**. '***Timer Cleared***' will briefly appear on the TV screen.
'--' appears rather than the displayed values
3 To end, press **TIMER**.

Tip

Timer
Timer List

Date	Ch.	Start	End	Rec Mode
01/22	01	04:25PM	06:05PM	HQ
--/--	-----	--:--	--:--	---

Total record time: 01:40

To change Press ›
To exit Press TIMER

5 Press ▶ .
Select a field with ◀ or ▶ .
If required, change the information with ▲ , ▼ or the number buttons **0..9** .

6 In '***Date***', you first enter the month and then the date.

7 Confirm with **OK** .

8 To end, press **TIMER** .

9 Switch off with **STANDBY** ⏻ .

Problem solving for programmed recordings

PROBLEM	SOLUTION
DVD recorder does not respond	✓While a programmed recording is being made, you cannot operate your DVD recorder manually. If you want to cancel the programmed recording, press STANDBY ⏻.
'*Switch off, timer recording*' flashes on the TV screen.	✓The DVD recorder was switched on before the start of a programmed recording. Turn off the DVD recorder by pressing **STANDBY** ⏻. A programmed recording (timer) will only function if the DVD recorder is switched off (button **STANDBY** ⏻).
Error message: '*Insert recordable disc*'	✓Either no disc was inserted or a disc was inserted that cannot be used for recordings. Insert a disc that can be recorded upon. Turn off the DVD recorder by pressing STANDBY ⏻.
The message '*Disc locked*' flashes briefly on the screen.	✓A protected disc was inserted. Undo the erase protection or insert a different disc.
Error message: '*Memory full*'	✓If this error message appears after pressing TIMER, then all TIMER blocks are already programmed. No more recordings can be programmed. Press the ▶ button to continue. To clear or check a programmed recording, select it with ▲ or ▼.
The '*Data error*' message appears on the screen.	✓The data for the recording could not be transferred. Please check date, start time, and end time of the programmed recording.
The message '*Collision*' appears on the screen.	✓The timer recorder overlaps with another timer recording. ✓If you ignore this warning, the programmed recording with the later start time will be recorded. The second recording will then lack the beginning. ✓Change the information from one of the two recordings. ✓Delete one of the two recordings.

11 User preferences

This section explains how to customize the DVD recorder to your preferences. These icons indicate the following:

	Picture settings
	Sound settings
	Language settings
	Additional settings
	Recording settings
	Installation

1 Switch on the TV. If required, select the channel number for the DVD recorder (channel 3 or 4 or Audio/Video In).

2 Press **SYSTEM-MENU** on the remote control. The menu bar will appear at the top of the TV screen.

3 Select 'T' with ◄ or ► and confirm with ▼ .

4 Select the corresponding function with ▼ or ▲ and confirm with ► .

5 Select the corresponding line with ▼ or ▲ and confirm with the ► button. Choose an item you want to adjust, using the instructions provided on the following pages.

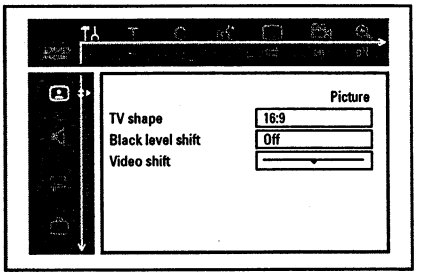
6 Select the corresponding function with ▼ or ▲ , or select the setting with ◄ or ► . Choose an item you want to adjust, using the instructions provided on the following pages.

7 Confirm the new setting by pressing **OK** .

8 To close the menu item, press ◄ . To remove the menus, press SYSTEM MENU repeatedly.

Picture settings

You can select the following functions in this menu:



'TV shape'

The picture signal can be adjusted to fit your TV:

'***4:3 letterbox***' for a 'wide-screen' display with black bars on the top and bottom

'***4:3 panscan***' for a full-height picture with the sides trimmed

'***16:9***' for wide-screen TV

'Black level shift'

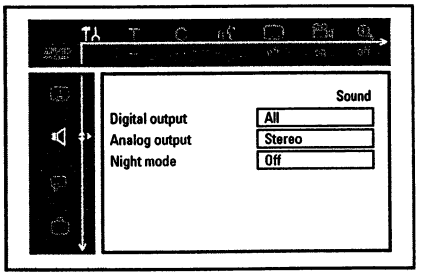
Adapts the color dynamic for NTSC playback when set to ON.

'Video shift'

This allows you to move the picture left or right using the ◀ , ▶ buttons in order to adjust the picture to your TV screen.

Sound settings

Depending on the audio outputs being used, this menu provides you with a selection of settings. If you are only using the analog audio outputs (red and white AUDIO OUT L/R), select '***Off***' in the '***Digital output***' menu.



'Digital output'

You can select from the following settings for devices connected to the **DIGITAL AUDIO OUT** jack.

'***All***': Dolby Digital and DTS signals are going out unchanged to the digital output. MPEG-2 Multi-channel signals are converted to PCM (Pulse Code Modulation).
Use receivers/amplifiers **with a digital Multi-channel sound decoder.**

'***PCM only***' : Dolby Digital and MPEG-2 Multi-channel signals are converted to PCM (Pulse Code Modulation).
Use receivers/amplifiers **without a digital Multi-channel sound decoder.**

'***Off***' : digital output turned off.
Use devices **with an analog audio input.**

'Analog output'

You can select from the following settings for devices connected to the analog outputs (AUDIO OUT L/R).

Stereo: For devices that use neither DolbySurround nor TruSurround. Only use this setting when the DVD recorder is connected to a stereo TV.

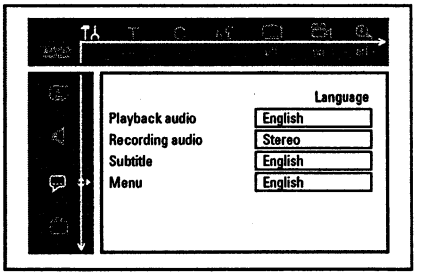
Surround: Dolby Digital and MPEG-2 Multi-channel are mixed to a Dolby Surround-compatible two-channel output.
Use devices **with a Dolby Surround / Pro Logic decoder** .

'Night mode'

Night mode optimizes the sound dynamic for low volumes When turned on. This provides less disturbance in quiet environments. This setting only functions with Dolby Digital Audio on DVDs.

Language settings

You can select the following settings in this menu:



'Playback audio'

Language of DVDs

'Recording audio'

Audio recording of a TV channel

'Subtitle'

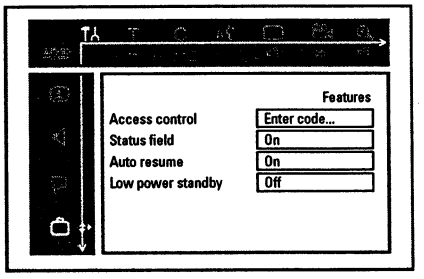
Subtitle language for DVDs

'Menu'

Recorder menu language

Additional settings

You can select the following functions in this menu:



'Access control'

Please read the chapter on Child lock.

'Status field'

Along with the on screen menu, the OSD (On Screen Display) also displays the current operating status on the TV screen (counter, playback, recording, TV channel,...).
You can switch off the information about the operating status so as to avoid recording this information when making recordings.

'*On*': The Status Box appears with every selected mode for a few seconds, then disappears again.

'*Off*': The Status Boxes will not appear on the TV screen.

Auto resume

If playback of a pre-recorded DVD or VCD is interrupted (**STOP** ■ or **OPEN/CLOSE**), playback will be restarted at the exact location when the disc is reinserted. This function only applies to the last 20 discs you played.

If desired, this function can be turned off.

Low power standby

To save energy, you can switch off the clock display on the DVD recorder. Programmed (TIMER) recordings will still take place.

'*On*': If the DVD Recorder is switched off using **STANDBY** ⏻ , the clock display is also switched off.

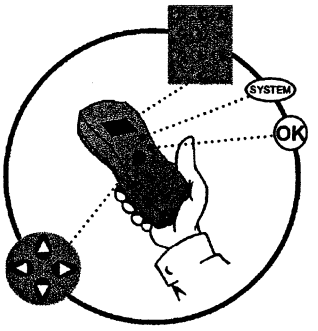
'*Off*': If the DVD Recorder is switched off using **STANDBY** ⏻ , the clock display is visible.

'PBC'

This line only appears when a VCD has been inserted.
This function is used to activate or deactivate the PBC menu (playback control) of the Video CDs. For more information, please see the chapter on "Playback", "Playback of a (Super) Video CD.

12 Child lock

Child lock (DVD and VCD)



This function can prevent children from viewing discs.
When in use, a four-digit code (PIN) must be entered in order to play a disc.
In addition, you can set a disc to be played 'always' or 'once' despite the child lock.

•)***Play always***:
This disc has been placed in a list of 50 other 'child safe discs'. When more than 50 discs have been added to the list, the oldest disc is removed to make room for the new one. 'Child safe' will appear on the screen at the start of playback.

•)***Play once***:
This disc can be played only once. The PIN must be reentered the next time you try to play the disc.

Activating/Deactivating the child lock

1. Switch on the TV. If required, select the channel number for the DVD recorder (channel 3 or 4 or the Audio/Video In channel).
2. Turn on the DVD recorder by pressing **STANDBY/ON**.
3. Press **SYSTEM-MENU**. The menu bar will appear at the top of the TV screen.
4. Select '🔧' using ◄ or ►.
5. Select line '***Features***' using ▼ or ▲ and confirm with ►.
6. '***Access control*** will be selected. Press ►.
7. Press the number buttons to enter a four-digit code of your choice. If this is you first time entering your code, you must enter this code a second time to confirm it.
8. Select '***Child lock***' using ▲ or ▼ and press ►.
9. Select '🔒' using ▼ or ▲.
10. Confirm with **OK**.
11. To end, press ◄ and **SYSTEM-MENU**.

If you activated Child Lock, you will need to enter the four-digit PIN in order to play locked discs.

Authorizing discs

1 Insert a disc. After a short check, the access control menu will appear on the TV screen.

2 Using ▲ or ▼ , select '***Play once***' or '***Play always.***'

3 Use the number buttons **0..9** to enter your PIN.

Double-sided DVDs can have a unique ID number for each side. To completely authorize these discs, you must authorize each side separately. 'Multi-track' VCDs can also have a unique ID number for each track. To authorize the complete set, each track must be authorized separately.

Locking authorized discs

Proceed as follows to lock an authorized disc.

1 Insert the disc. Playback starts automatically. If playback does not start automatically, press **PLAY/PAUSE ►II** .

2 Press **STOP ■** while the icon ' ' is being displayed. The icon will change to ''. This disc is now locked for further use.

Parental control (DVD video only)

Movies on DVDs may contain scenes which are not suitable for children. DVDs sometimes come with rating information for the entire DVD or only for certain scenes.
Affected scenes are rated from 1 to 8. If a scene with such a rating is recognized during playback, the DVD recorder compares the Parental control rating with that of the DVD scene. If the scene rating exceeds the Parental control rating, an alternative scene will be played back (if available).

Activating/Deactivating the parental control

1 Switch on the TV. If required, select the channel number for the DVD recorder (channel 3 or 4).

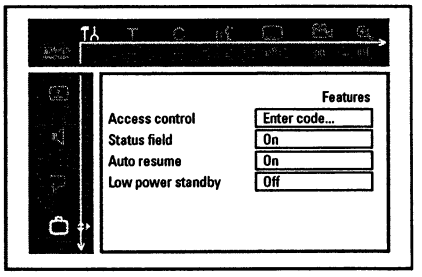
2 Turn on the DVD recorder by pressing **STANDBY/ON**.

3 Press **SYSTEM-MENU**. The menu bar will appear in the display.

4 Select 'T' using ◄ or ► .

5 Select line '***Features***' using ▼ or ▲ and confirm with ► .

6 '***Access control***' wil be selected. Press ► .



7 Enter a four-digit code of your choice. If you are entering the code for the first time, you must enter it again to confirm.

8 Select '***Parental level***' with ▲ or ▼ and confirm with ► . A bar appears for selecting the parental control level.

9 Select the corresponding parental level using ▼ , ▲ or the number buttons **0..9** .

What do the parental levels mean?

Rating 0 (displayed as '–') parental control is not active.
Rating 1 (childsafe)
Rating 8 (for adults only)

What happens when a DVD scene with a higher rating than authorized is played?

If the recorder cannot find a suitable alternative, playback is stopped until the four-digit code is entered.

Tip

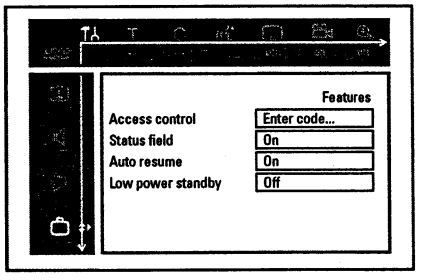
10 Confirm with **OK**. To remove the menus, press ◄ and **SYSTEM-MENU** .

Most DVDs apply the rating to an entire DVD. Therefore, if certain scenes exceed the rating you select, the entire disc will be blocked from viewing.

Changing the country

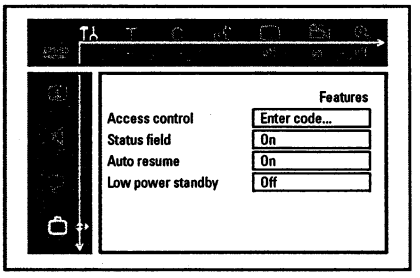
The Parental Contro levels depend on the country in which the DVD was manufactured. Therefore, it is necessary that you enter the country for which these filter values apply.

1. Switch on the TV. If required, select the channel number for the DVD recorder (channel 3 or 4 or Audio/Video in).
2. Turn on the DVD recorder by pressing **STANDBY/ON**.
3. Press **SYSTEM-MENU**. The menu bar will appear in the display.
4. Select 'T' using ◄ or ►.
5. Select line '***Features***' using ▼ or ▲ and confirm with ►.
6. '***Access control***' will be selected. Press ►.
7. Enter your four-digit code. (You may have to enter it twice to confirm it.)
8. Select '***Change country***' using ▲ or ▼ and confirm with ►.
9. Select your country ot that of the DVD using ▲ or ▼ and confirm with **OK**.
10. To end, press **SYSTEM-MENU**.



Changing the PIN

1. Switch on the TV. If required, select the channel number for the DVD recorder (channel 3 or 4 or Audio/Video in channel).
2. Turn on the DVD recorder by pressing **STANDBY/ON**.
3. Press **SYSTEM-MENU**. The menu bar will appear in the display.
4. Select 'T' using ◄ or ►.
5. Select line '***Features***' using ▼ or ▲ and confirm with ►.
6. '***Access control*** wil be selected. Press ►.
7. Enter your four-digit code. (You may have to enter the code twice to confirm it.)
8. Select the line '***Change code***' using ▲ or ▼ and confirm with ►.
9. Enter the new code with the number buttons **0..9**. Enterthe code again to confirm the change.
10. To end, press **SYSTEM-MENU**.



I forgot my code.

When it asks for the code, press the **STOP** ■ button four times and then press **OK**. The code entry is now deactivated. You can now enter a new code as described above.

Tip

13 Before you call technical support

ENGLISH

If you have any problems using this DVD recorder, it may be caused by one of the following reasons. You can also call the **customer service center**in your country.
The telephone numbers are listed in the warranty booklet provided.
Have the model number (MODEL NO) and the production number (PROD.NO) ready.
The serial number (PROD. NO.) is printed on the type plate fixed at the rear of the set.

PROBLEM	SOLUTION
Your DVD recorder does not respond to any button being pressed, and 'INSTALL' appears in the display.	✓Device is in 'Initial Installation mode'. Turn on the TV and tune it to the Audio/Video in channel on channel 3 or 4. Now the menu for language selection should appear. Please read 'Initial installation' in 'Installing your DVD Recorder'.
The device does not react to the touch of a button, or the remote control is working	✓'Dealer Mode' is on. All buttons at the front of the Recorder are locked. To switch off this function: 1 Disconnect the recorder from the power supply. 2 Press and hold down ■**STOP** and **OPEN/CLOSE** and re-connect the recorder to the power supply. 3 As soon as the time or '--:--' appears in the display (6 - 10 seconds), release ■**STOP** and **OPEN/CLOSE**.
Your DVD recorder does not respond to any button being pressed.	✓There is no power. Check the power supply. ✓A programmed recording (TIMER) is currently being made. If desired, cancel the programmed recording (Timer) with **STANDBY**. ✓There is a technical problem. Disconnect from the power outlet for 30 seconds then connect again. If this doesn't help, reset your DVD recorder to the default factory settings.
Resetting devices to default factory settings	✓All the information stored (TV channels, time and date, and TIMER recordings) will be cleared. 1 Disconnect the Recorder from the power outlet. 2 Press and hold down the **STANDBY/ON** button on the front of the Recorder while reconnecting to the power outlet. 3 Release **STANDBY/ON** when 'IS TV ONP' appears in the display. All the information stored will be cleared. Read paragraph 'Initial Installation' in 'Installing your DVD Recorder'.
Remote control does not work	✓There is a technical problem. Take out the batteries, wait for 30 seconds and then replace them. ✓Remote control range: Change the distance and/or angle. If the ▯ appears on the display each time you press a remote control button, the Recorder is receiving information from the remote correctly.
No playback on DVD recorder:	✓There is no recording on the disc. Change disc. ✓You inserted the wrong disc type. Your recorder can play the following disc types: DVD Video, (Super)Video CD, DVD+R(W) Audio CDs and MP3 CDs. ✓You inserted the disc the wrong way: Insert the disc with the label facing up. ✓Disc is dirty. Clean the disc ✓Wrong region code. The region code of the DVD and the DVD recorder must match. ✓Parental control is on. Read chapter 'Child lock' ✓You have selected the wrong channel number on the TV for the DVD recorder: On the TV, select the correct channel number (channel 3 or 4). ✓The cable connecting the TV and the DVD recorder may be loose. Check the cable.

PROBLEM	SOLUTION
I cannot playback (Super) Video CDs	✓It is possible that this (Super) Video CD contains a menu and the PBC is switched off. You can see this in status field *PBC OFF*. To activate this function proceed as follows: 1 Press SYSTEM-MENU while the (Super) Video-CD is inserted. 2 Select *Tx* using ◄ or ►. 3 Select line *Features* using ▼ or ▲ and confirm with ►. 4 Select *On* in line *PBC* using ▼ or ▲. 5 Confirm with OK and end with SYSTEM-MENU.
Poor playback on DVD recorder (distorted picture/distorted sound)	✓Your TV is not properly adjusted. ✓The disc is dirty. Clean the disc. ✓Sometimes the picture may be temporarily distorted. This is not a defect of your DVD recorder.
No recording possible	✓The TV channel you want to record is not stored or you selected the wrong program number. Check TV channels stored. ✓Disc is write-protected (cannot be recorded on). Remove write-protection or change disc. For more information, please see 'Preventing accidental erasing of discs' on the 'Manual Recording' page. ✓A finalized DVD+R disc has been inserted. Change disc.
Programmed recording does not work.	✓You have programmed the wrong time or date. Check time/date. ✓You have not set the TIMER properly. Check the programmed recordings. ✓A locked disc inserted. Remove disc lock. ✓A finalized DVD+R has been inserted. Change disc.
The wrong TV channel was entered after you programmed a recording using the VCR Plus+ system.	1 Enter the PlusCode programming number of the desired TV channel. 2 Confirm with OK. 3 Check the channel number in the *CH* input field. 4 If this does not correspond to the desired TV channel, select the channel field and change the channel number. 5 Confirm with OK.
There is picture or sound interference with the TV reception.	✓During playback via the internal TV tuner (**MONITOR** button), switch to recording mode '*HQ*' by pressing **REC MODE** . This will give you the best possible picture quality. Before making the recording, select the recording mode as described in 'Selecting the recording mode (quality)' . ✓Change channels at the TV. Press CH- or CH+ to go to channel 4, 3, or Audio/Video In, EXT IN, ANT IN, etc. ✓Have your antenna or Cable TV signal checked.
Distorted sound coming from a connected hi-fi amplifier	✓The DVD recorder is connected to the 'Phono-Input' of your amplifier. This jack is provided only for record players without a preamplifier. Connect to a different audio input.
The picture is distorted or black-and-white during playback.	✓The TV system of the disc does not match that of your TV (PAL/NTSC). ✓The recording can be made in color only when the TV channels or the connected additional device sends a color signal. Black-and-white signals without color information (color subcarriers) cannot be recorded in color.
No sound signal at the digital output	✓Check whether the sound settings match the selected inputs and connected additional devices.

PROBLEM	SOLUTION
A DVD+RW cannot be played on certain DVD players	✓If a recording is too short, it is possible that a DVD player cannot detect it. Please observe the following 'Minimum recording times': Recording mode '***HQ***', 5 minutes; '***SP+***', 13 minutes; '***EP***', 20 minutes; '***EP+***', 30 minutes, ✓Some DVD players cannot playback DVD+RW recordings. You can solve this problem by using a special function. 1 Open the disc tray with **OPEN/CLOSE** . Insert the disc but do not close the tray. 2 Hold down the number button **2** on the remote control until the tray closes. The disc is modified. 3 If this fails to produce the desired result, repeat the procedure using the number button **3** on the remote control. 4 You can restore the disc to its original condition by pressing and holding **1** . **Warning!** There is a risk that you can no longer play the disc on other DVD players after this procedure. Therefore, apply this function with particular care.
Other disc errors	✓If it is impossible to play a disc, you can try and repair it for new recordings using the following function. The disc will only be prepared for deletion. It will be deleted only after the next recording has taken place. 1 Clear the disc. 2 Open the disc tray with 'OPEN/CLOSE'. Insert the disc but do not close the tray. 3 Hold down 'CLEAR' on the remote control for several seconds until the tray closes. The disc is prepared for deletion. 4 Start recording as with an empty disc.

Limited Warranty

ENGLISH

DVD Recorder
One year Free Labor / One year Parts Exchange
This product must be carried in for repair.

WHO IS COVERED?
You must have proof of purchase to receive warranty service. A sales receipt or other document showing that you purchased the product is considered proof of purchase.

WHAT IS COVERED?
Warranty coverage begins the day you buy your product. *For one year thereafter,* all parts will be repaired or replaced, and labor is free.
After one year from the day of purchase, you pay for the replacement or repair of all parts, and for all labor charges. All parts, including repaired and replaced parts, are covered only for the original warranty period. When the warranty on the product expires, the warranty on all replaced and repaired parts also expires.

WHAT IS EXCLUDED?
Your warranty does not cover:
- labor charges for installation or setup of the product, adjustment of customer controls on the product, and installation or repair of antenna systems outside of the product.
- product repair and/or part replacement because of misuse, accident, unauthorized repair or other cause not within the control of Magnavox.
- reception problems caused by signal conditions or cable or antenna systems outside the unit.
- a product that requires modification or adaptation to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or repair of products damaged by these modifications.
- incidental or consequential damages resulting from the product. (Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you. This includes, but is not limited to, prerecorded material, whether copyrighted or not copyrighted.)
- a product that is used for commercial or institutional purposes (including but not limited to rental purposes).

WHERE IS SERVICE AVAILABLE?
Warranty service is available in all countries where the product is officially distributed by Magnavox. In countries where Magnavox does not distribute the product, the local Magnavox service organization will attempt to provide service (although there may be a delay if the appropriate spare parts and technical manual(s) are not readily available).

MAKE SURE YOU KEEP...
Please keep your sales receipt or other document showing proof of purchase. Attach it to the owner's manual and keep both nearby. Also keep the original box and packing material in case you need to return your product.

BEFORE REQUESTING SERVICE...
Please check your owner's manual before requesting service. Adjustments of the controls discussed there may save you a service call.

TO GET WARRANTY SERVICE IN THE U.S.A., PUERTO RICO, OR U.S. VIRGIN ISLANDS...
Take the product to a Magnavox factory service center (see enclosed list) or authorized service center for repair. When the product has been repaired, you must pick up the unit at the center. Centers may keep defective parts.
(In the U.S.A., Puerto Rico, and U.S. Virgin Islands, all implied warranties, including implied warranties of merchantability and fitness for a particular purpose, are limited in duration to the duration of this express warranty. Because some states do not allow limitations on how long an implied warranty may last, this limitation may not apply to you.)

TO GET WARRANTY SERVICE IN CANADA...
Please contact Magnavox at:
1-800-705-2000

(In Canada, this warranty is given in lieu of all other warranties. No other warranties are expressed or implied, including any implied warranties of merchantability or fitness for a particular purpose. Magnavox is not liable under any circumstances for any direct, indirect, special, incidental or consequential damages, howsoever incurred, even if notified of the possibility of such damages.)

REMEMBER...
Please record below the model and serial numbers found on the product. Also, please fill out and mail your warranty registration card promptly. It will be easier for us to notify you if necessary.

Model #: _____

Serial #: _____

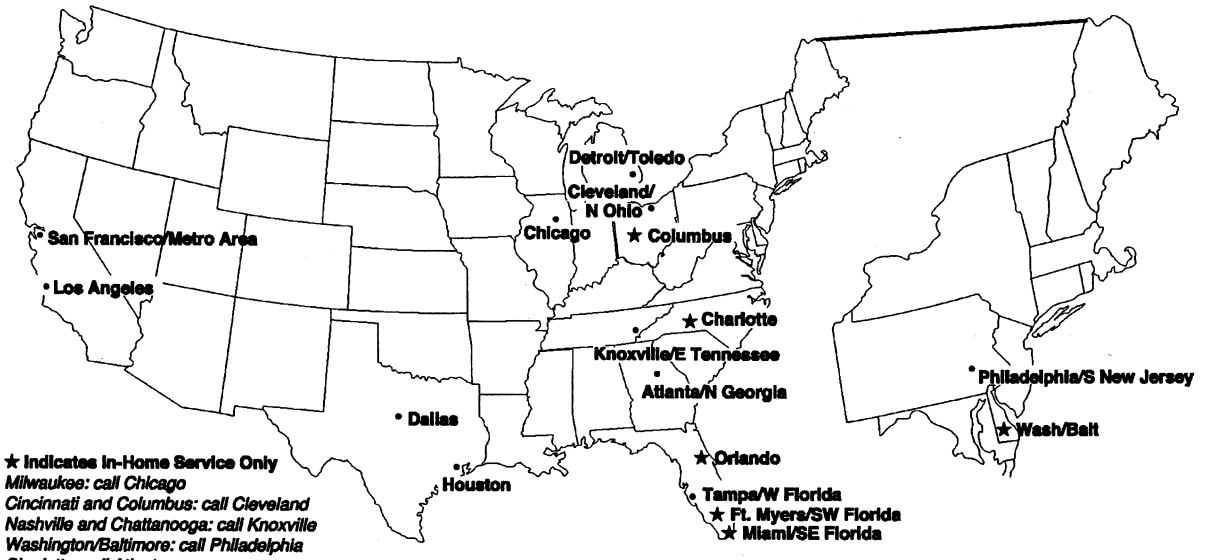
This warranty gives you specific legal rights. You may have other rights which vary from state/province to state/province.

Magnavox, P.O. Box 520890, Miami, FL 33152, (402) 536-4171

EL6554E001 / 03-03

MDV630R/MDV650R
3103 605 20842
3361/000

FACTORY SERVICE LOCATIONS



★ Indicates In-Home Service Only
Milwaukee: call Chicago
Cincinnati and Columbus: call Cleveland
Nashville and Chattanooga: call Knoxville
Washington/Baltimore: call Philadelphia
Charlotte: call Atlanta
San Antonio: call Houston
All Florida locations; call Tampa

• Indicates In-Home/Carry-In Service
Toll-free numbers provided on the next page

NOTE: Magnavox has chosen Philips Factory Service as its preferred, authorized servicer. Please contact a Philips Factory Service Center. If you reside in one of our Philips Factory Service Branch areas, you can contact the nearest Service Branch to obtain efficient and expedient repair for your product. If your product is In-Warranty, you should have proof-of-purchase to ensure No Charge Service. For Out-of-Warranty service, call the location nearest you.

NOTA: Si vous résidez dans une des régions desservies par une succursale de service après vente du fabricant Philips (voir liste ci-dessous), vous pourrez contacter la branche de service après vente la plus près de chez vous pour obtenir un service après vente rapide et efficace. Si le produit est sous garantie, il suffira de présenter une preuve d achat pour bénéficier d'un service sans frais. Pour les produits non couverts par la garantie, contactez le centre le plus près de chez vous.

NOTA: Si Ud. reside en una de nuestras zonas para sucursales Philips de servicio al de fábrica (ver directorio más abajo), Ud. puede comunicarse con la sucursal de servicio más cercana para obtener una reparación oportuna y eficaz de su producto. Si su producto está todavía bajo garantía, Ud. debe presentar comprobante de compra para no ocasionar ningunos cargos por servicio. Para servicio después del vencimiento de la garantía, llame al lugar más cercano de los abajo indicados.

In Canada

To obtain efficient and expedient carry-in, mail-in, or in-home service for your product, please contact Magnavox at:

1-800-661-6162 (French speaking)
1-800-705-2000 (English or Spanish speaking)

Au Canada

Comment obtenir le service après-vente pour les produits apportés ou envoyés par la poste à notre centre de service ou le service à domicile. Veuillez contacter philips á:

1-800-661-6162 (Francophone)
1-800-705-2000 (Anglais ou Espagnol)

En el Canadá

Cómo recibir servicio efficiente para su producto, en persona, por correo o a domicillo Favor de comunicarse con Philips al:

1-800-661-6162 (francófono)
1-800-705-2000 (Inglés o Español)

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FACTORY SERVICE LOCATIONS

QUALITY SERVICE IS AS CLOSE AS YOUR TELEPHONE! SIMPLY LOOK OVER THE LIST BELOW FOR THE NUMBER OF A FACTORY SERVICE CENTER NEAR YOU. YOUR PRODUCT WILL RECEIVE EFFICIENT AND EXPEDIENT CARRY-IN, MAIL-IN, OR IN-HOME SERVICE, AND YOU WILL RECEIVE PEACE OF MIND, KNOWING YOUR PRODUCT IS BEING GIVEN THE EXPERT ATTENTION OF PHILIPS' FACTORY SERVICE.

COMMENT OBTENIR NOTRE SERVICE APRÈS VENTE RAPIDE ET EFFICACE SOIT PAR COURRIER, À DOMICILE, OU EN SE PRÉSENTANT À UN CENTRE DE SERVICE PHILIPS. PLUS DE 600 CENTRES DE RÉCEPTION DE PRODUITS À RÉPARER À TRAVERS LE PAYS: CONTACTER LE CENTRE DE SERVICE AUX CONSOMMATEURS LE PLUS PROCHE POUR SAVOIR L'EMPLACEMENT DE CES DÉPÔTS DANS UN RAYON DE 50 À 75 MILES (80 KM À 120 KM) DU CENTRE DE SERVICE LOCAL.

CÓMO OBTENER UN SERVICIO OPORTUNO Y EFICIENTE POR CORREO, EN CASA O EN PERSONA PARA SU PRODUCTO A TRAVÉS DE UN CENTRO PHILIPS DE SERVICIO. MAS DE 600 SITIOS POR TODO EL PAIS PARA LA RECEPCION DE PRODUCTOS NECESITADOS DE REPARACIONES: COMUNICARSE CON EL CENTRO DE SERVICIO DE FABRICA MAS CERCANO PARA ESTOS LUGARES DENTRO DE UN RADIO DE 80 A 120 KM (50 A 75 MILLAS) DEL CENTRO DE SERVICIO LOCAL.

ATLANTA
Philips Factory Service
550 Franklin Road., Suite F
Marietta, GA 30067
800-273-1501

CLEVELAND
Philips Factory Service
950 Keynote Circle
Brooklyn Heights, OH 44131
800-331-7037

CHICAGO
Philips Factory Service
1279 W. Hamilton Pkwy.
Itasca, IL 60143
800-531-2922

TAMPA
Philips Factory Service
1911 US Highway 301 North,
Suite 100
Tampa, FL 33619
800-442-2027

DETROIT
Philips Factory Service
25173 Dequindre
Madison Heights, MI 48071
800-438-1398

KNOXVILLE
Philips Factory Service
One Philips Drive
Building 2
Knoxville, TN 37914
800-821-1767

SAN FRANCISCO
Philips Factory Service
681 East Brokaw Rd.
San Jose, CA 95112
800-300-9013

DALLAS
Philips Factory Service
415 N. Main Street, #107
Euless, TX 76040
800-952-3254

PHILADELPHIA
Philips Factory Service
354 Dunks Ferry Rd.
Bensalem, PA 19020
800-847-9320

HOUSTON
Philips Factory Service
1110 N. Post Oak Rd.,
Suite 100
Houston, TX 77055
800-952-3254

LOS ANGELES
Philips Factory Service
20930 Bonita, Ste. V
Carson, CA 90746
800-300-9013

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